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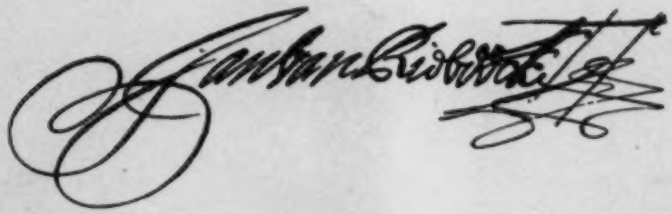

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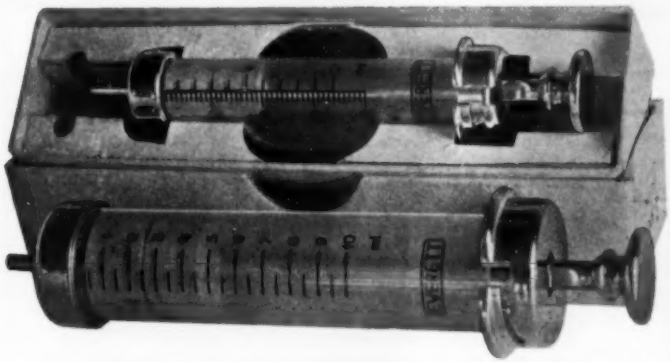

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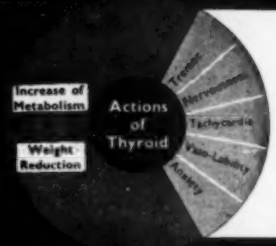

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VAN RIEBEECK'S YOUTH, FAMILY AND MEDICAL TRAINING

H. S. N. MENKO, MED. DOCTORANDUS, ARTS (UNIVERSITY OF UTRECHT, HOLLAND), L.R.C.P. AND S. (EDIN.), L.R.F.P. AND S. (GLASGOW)

Johannesburg

Johan van Riebeeck van born in Culemborg in 1618. His parents were Anthony Janszoon van Riebeeck, a ship's Captain, and Elizabeth Govertsdochter van Gaasbeek. The name was derived from some kind of cane-overgrown brook, probably in the vicinity of the river Lek, possibly de Linge. The van Riebeeck family coat-of-arms comprised three golden rings on a red background, with a crest of an arm holding a golden ring. In 1804 the shield was placed on an anchor on a golden background and used as Cape Town's coat-of-arms.

When Johan van Riebeeck was 11 years old, he lost his mother and most probably came under his grandfather's care. After his school training he served an apprenticeship in the art of surgery.

For his medical training, which he received in Amsterdam, van Riebeeck went to a surgeon. His apprenticeship included the art of shaving, curling locks and, with a warm pair of tongs, curling moustaches. For his examination he had to profess the following subjects:—

1. The anatomy of a corpse;
2. The opening of a skull;
3. Bandaging the sick;
4. Questions about wounds, ulcers, swellings, dislocations and fractures, the art of dressing wounds and a knowledge of instruments.

After having successfully passed this examination, he was accepted as a member of the Guild of Surgery and was able to call himself 'barber-surgeon'[1] and got a licence to practice.

1. 'Barber-surgeon' was an expression used during the time of the establishment of the Company and long after to denote a surgeon. In 1545, in France, the complete separation of the surgeons from the barbers, who were actually operators, took place. In 1713, in Leiden, a former barber Rau became a professor. In England, until the commencement of this century, 'barbers' were members of the 'College of Surgeons'. (Haeser in *History of Medicine*, translated by Dr. A. N. Israels, 1895).
From *Therapeutics in the Dutch Navy*, by Dr. G. F. Pop, p. 286.

About van Riebeeck himself little is known. His father and also his uncle were ship's captains; his grandfather on his mother's side was a merchant. These facts probably had a great influence on him. In his grandfather's house he received guidance for his future life; shrewdness and caution, not derived from fear or timidity, but from careful consideration, were typical of Johan van Riebeeck and came to the fore in his early youth.

When he was 21 he entered the service of the East India Company, as a junior surgeon (onder-chirurgyn). He left Goeree, an island in the province of South Holland, in the ship *Het Hof van Holland* on 19 April 1639 and on 14 June of the same year he was shipwrecked at Sierra Leone. The survivors were rescued by ships which had left the island of Texel on 19 January 1640. The shipwrecked seafarers thus arrived at Batavia at the end of July 1640; van Riebeeck sailed on the ship named *Zutphen*. The following year he realized that he had a better future in an administrative and commercial sphere and asked to be released from his position as Junior Surgeon. This was agreed to. He showed great diligence and capability in his new position.

In 1642, as a secretary, he accompanied Pieter Soury, a deputy-commissioner, by order of the Government in Batavia, to the Queen of Atjeh and on 23 April 1643 the Company sent van Riebeeck to Japan as assistant commercial representative to Jan van Elseracq. Although Johan van Riebeeck did not go to Japan as a surgeon, he was most probably the first Dutch doctor in that part of the world. In the same year Schambergen arrived in Japan, after a shipwreck, and worked alternately in Decima in the Dutch factory and in Yedo, where he taught surgery to several Japanese doctors.

After spending a few months in Decima, van Riebeeck went to Tonkin, then a vassal state of China. In 1645 he was appointed chief in Tonkin and left there in 1647 to go to Nagasaki, arriving in India on 2 December that year. On 8 August 1648 he returned to his homeland.

In 1649 he married Marie de la Quellerie. She was the

granddaughter of a French nobleman Cretian de la Quellerie; she never knew her father Abraham, as he died when she was one year old. Her childhood was spent in Leiden and in 1649 she lived in Schiedam, where she met van Riebeeck. She was a pretty brunette and they were very happy. She had several children, sons and daughters. One son, Abraham, born in South Africa, later became Governor-General of Dutch East India.

Van Riebeeck's wife died on 2 November 1664. Two years later he re-married. His second wife was Marie Izaaks Scipio, from Alkmaar, who faithfully helped him with the education of his children.

Although so much has been published about Johan van Riebeeck, little has been written about his youth. Investigations made by the present writer in this connexion have failed to reveal any further particulars.

His fame commenced with the founding of the white settlement at the Cape of Good Hope. This overshadowed all else about him.

THE JOURNEY TO, AND ARRIVAL AT, THE CAPE

Van Riebeeck left the land of his birth in the flagship *De Drommedaris* on 24 December 1651. It was his last look at his birthplace; he would never set foot in Holland again. His wife and baby of one year were on board with him; also two of his nieces, Elizabeth and Sebastiene van Opdorp, whose guardian he was; as well as the family of his gardener (Boom) consisting of husband, wife and several children.

There was little light, cleanliness or fresh air on board. Sickness was considerable and the surgeons were kept busy. They diligently followed the instruction-letter of the 'Gentleman-Administrators' which set out that the surgeons, on arrival on board, had to see that all first-aid and plasters, wicks and compresses, bandages and splints were in readiness in case of unforseen circumstances. We also find a number of articles named in this letter in connexion with the nursing of the sick and the combating of sea-sickness. Particular mention was made about the cleanliness of the sick, and the need to see that the rooms were kept clean. The evaporation of vinegar over a fire and the burning of gunpowder were prescribed as an excellent means of cleansing the air. In particular, the treatment of scurvy and the necessary medicines therefor, was an important item.

The surgeons had to visit all the sick twice a day and those suffering from scurvy thrice daily. All particulars of illness which occurred on board had to be entered in a journal in order to increase the knowledge of the causes and the kind of illness and to improve the treatment of diseases occurring on board the Company's ships. They had to discuss, with the Captain, the food, drink and allocation of space for the sick; also arrangements for the recovery and prevention of further diseases and discomforts. These discussions were necessary to put a stop to the many complaints of the surgeons and the seamen about the behaviour of many Captains, who would not give the daily rations to the healthy and also, in case of need, deprived the sick of what they were entitled to have.

Apart from this, notes had to be kept about the food of the patients, and the quantity which could be used for this purpose from the stocks under the control of the Captain. The medicines were kept in a chest, of which the Chief Surgeon had the key; this was only handed to him after the ship had sailed. The chest was situated in or near the front of the ship's guard-room. Complaints were made that there was very little daylight and a candle or lantern had to be used. There were more than 150 different medicines and utensils. (After 1667 remedies for curing venereal disease were also carried.) Before sailing, some medicines and necessaries were given out to make up a first-aid box.

The appointments of the *Drommedaris* obviously left much to be desired and no better description can be given than that by Schoute in his book *Therapeutics in the Service of the East India Company in Dutch India*:

> 'The appointments of ships in respect of the harbouring of the passengers can be compared with the houses in the towns at that time. As picturesque and beautiful as these houses looked from the outside, so very little comfort they offered to the inhabitants.
>
> 'The insufficient heating from open fires, the candle or oil lighting, the very often bad and sometimes lead-containing water,[2] the disastrous arrangements of the toilets, together with insufficient ventilation, formed a great contrast with the very often attractive exterior.
>
> 'Thus were the ships of the Company, and the pictures of some were grand to look at; but for the passengers they offered very little, whether they were healthy or sick. All the objections of the houses could be found on the ships, but to a greater extent; and whether a *kuilschip* or a three-master, a fly-boat, a yacht or a snow were sailed, in every case the crew were housed between decks where they had to find room for their hammocks and kit. This confined space got its light and air through hatches and portholes only, and in consequence was very oppressive; but when, in the tropics, it was necessary to close all the hatches and portholes, the situation became dangerous to health and life. Apart from this, the kitchens were placed between decks and dispersed the excessive heat and smells.
>
> 'Under these conditions all and sundry had to lie, whether healthy or sick—dead-tired and soaked sailors, sea-sick and drunken crew. No wonder that in such an environment illnesses, infectious diseases especially, found a breeding place.'

The crew of the ships of the East India Company, which sailed to the Cape of Good Hope and then on to India, suffered mostly from three illnesses: respiratory diseases, scurvy and fevers. Of the first group not many suffered after leaving Europe in the summer. Scurvy did not occur until Cape Verde was reached, where the temperature was higher. Together with insufficient feeding, the first symptoms of this illness made themselves known.

Although much is written in the literature about fevers on board ships, it can be accepted that the most important fever was enteric. On the return voyage from India to South Africa, malaria often occurred on board. Although instructions were issued to keep journals, ship-surgeons did not do so during the whole of the seventeenth century. This is hardly surprising as the surgeons in the hospitals in Holland did not do so either.

On land and at sea they limited themselves in their narrative or accounts to some mention from time to time about their medical work, especially if the disease or the patient in particular attracted their attention; but this did not always occur.

Van Riebeeck had a favourable journey on the *Drommedaris*. Only two patients died—a carpenter and the child of the ship's surgeon. The bodies, which were thrown overboard, were sewn in canvas and drifted with

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the ships for many days. If land was in sight, money was put with the body to procure a decent funeral, should the body be washed ashore. Whether this actually occurred, or whether the Natives pocketed the money, is difficult to say.

After 3½ months the Cape was reached on 5 April 1652. In his diary, van Riebeeck mentioned: 'Around 5 bells in the afternoon watch (2.30 p.m.) we saw, God be thanked, the land of the Capo de Bona Esperance.'

On Sunday, 7 April 1652, van Riebeeck set out to find a suitable place to build the Fort. It was just about the dry season and everywhere the ground was dried up. The multi-coloured flowers in the fields, which during other seasons please the eyes of visitors, could not be found. The summer heat had passed but the rains, which transform the ground into a green carpet, had not yet fallen.

The landing of van Riebeeck was the beginning of the foundation of a white South Africa. This was a great honour for Holland and all the more because the founder of Netherlands South Africa was a medical man. By establishing the refreshment station he greatly contributed to the health conditions in general. An early illustration of the settlement is shown in Fig. 1.

VAN RIEBEECK'S WORK AT THE CAPE

On arrival at the Cape, Johan van Riebeeck's work was to establish the settlement and it was immediately evident that a great task lay before him. Contact with the different races caused him and his fellow-workers many worries, but nothing was too much for him—a sign of his character.

He was the first Dutch medical man in South Africa. Nowhere is there any evidence that he was a master of medical science. He lacked the many-sided knowledge of a Boerhaave, the method of a van Swieten, to go into the smallest detail, or the scientific aim of a van Leeuwenhoek.

His purpose was to climb the highest rung of the ladder in the service of the Company. He felt that he had to satisfy the 'Masters XVII' in every respect and he had to have the courage, while establishing the settlement at the Cape, to take big resolutions to which his masters could not raise objection.

He felt that his education was lacking when mixing with important guests. His English and French were weak; on the other hand, through his stay in India, Japan and

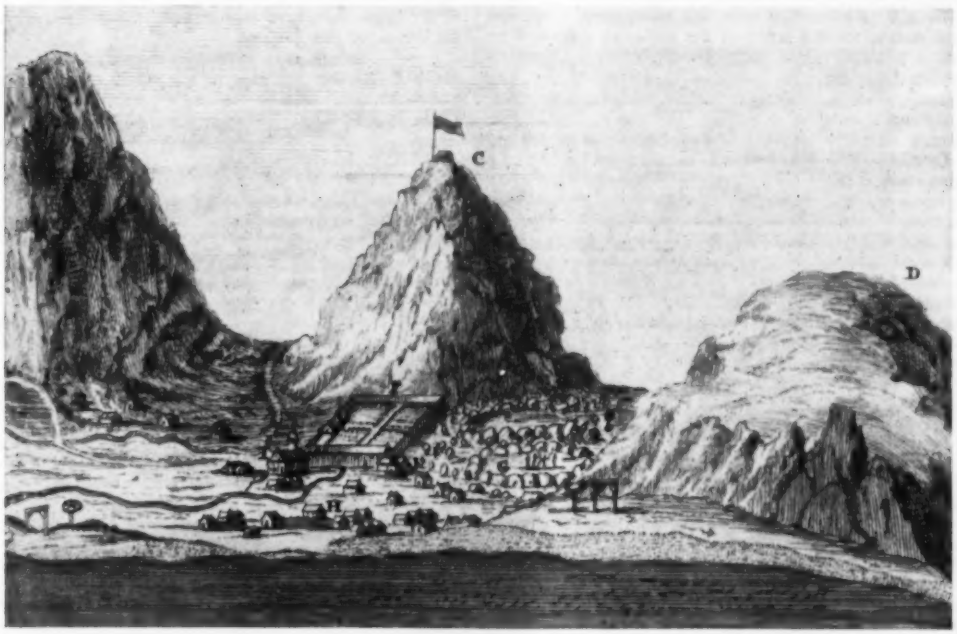

Fig. 1. An early illustration of the settlement at the Cape of Good Hope (*from* Kolbe).

[An interesting feature in this very inaccurate drawing is the situation of the Company's Gardens (F). In the foreground on the left can be seen the gallows and the wheel on which convicted prisoners were broken. This has been described very strikingly by Mr. Victor de Kock in his book *Those in Bondage*.

Another wheel alongside a gallows is to be seen in the right foreground of the illustration. This site has been perpetuated in the road known to-day as Gallow's Hill Road (Green Point) where the offices of the Traffic Department of the City of Cape Town are located. It is to the offices in this road that citizens are (appropriately enough) required to repair to pay their fines for traffic offences!—*Editor.*]

China he had enough opportunity to learn the language of these countries.

He was not liked by everyone and had many enemies. He was, however, one of the best servants of the East India Company, self-sacrificing, a strong disciplinarian and a worthy servant of God and his masters. That he was an assiduous man came to the fore in his motto: 'Who seeks advancement, must not spare diligence.' He reacted sharply when he was spoken to in an unfriendly manner. He was a non-fanatical, religious man and did not put religion to the fore. This was evident from the fact that Cape Town had established a hospital and that there were 5 surgeons before there was one church and one parson.

He was very inquisitive and by listening to them, he got an insight into the ideas of the Natives, especially about life after death. During his stay in Tonkin he had an opportunity of studying Buddhism and later in the Cape he often spoke, through the medium of Eva the Interpretress, with the Chief of the Natives. As a simple Hollander he could not agree with the conception of the religion of the Natives he met in the settlement, and he very often showed great contempt in this respect. Notwithstanding this, he was greatly interested in the life and thought of the Natives and tried to improve their minds.

His first and foremost care was to establish a refreshment station for the crews of the incoming ships and to erect a hospital where the crews could be cured of the illnesses from which they suffered on arrival.

Scurvy was the principal of these diseases and a few particulars should be narrated about the history of this ailment. In 1219 scurvy was described during the siege of Damiette (Damiate) by the Crusaders; also in 1249 the disease was observed in the army of the Holy Louis. In his thesis *The Scurvy in the Course of Time*, Augustijn mentioned many historical facts about this illness, but it was only in 1927 that it was definitely established that the lack of the anti-scorbutic vitamin C was the cause of the disease. In his book *Surgeons' Travel Guide*, Verbrugge, a surgeon, stated to the Guild of Middelburg in 1653 that scurvy was a contamination of the blood and spread through putrid melancholic fluids; that there were two kinds of this disease, the first on land, the other contracted at sea. Stale food and greedy eating were the causes of the latter form.

The crews of incoming ships, shortly after the Company was established at the Cape, could partake of refreshments of a varying kind. Apart from fresh meat, milk, chickens, we read of cabbage, carrots, beetroot, radishes and watermelon. It is claimed that in 1656 the Gardens at the Cape already contained and produced, apart from the above-mentioned vegetables, artichokes, potatoes, barley and horse beans, Turkish and Roman beans, ordinary beans, peas, currants, strawberries, prunes, pears, lemons, etc. Thus the sailors afflicted by scurvy, on reaching this blessed region, could get what their hearts desired. It is somewhat doubtful if all these fruits and greens could ripen in such a short time in South Africa; also it is very unlikely that potatoes grew here as, according to the historians, potatoes were not cultivated until the end of the 18th century in Europe. (In Germany Frederick the Great specially encouraged their cultivation.)

Although the idea of the Gardens at the Cape was conceived by van Riebeeck, the lion's share of this work must be attributed to his gardener, Hendrik Boom, who laid out the Gardens in a masterly fashion. It is most probable that he brought all kinds of seeds and slips from Holland. Apart from being a gardener, it is also mentioned in the literature that as a visitor to the sick he cured scurvey and dysentery with fresh greens.

The beauty and attractiveness of these Gardens was evident from the writings of the Rev. Francois Valentijn[3] who gave a description of the Cape of Good Hope: 'All that the veterans have achieved in the planning of parks —he even mentions the Hanging Gardens of Babylon— could not be compared with this magnificent Cape Garden.'

To alleviate scurvy van Riebeeck used asparagus and sorrel. These vegetables grew very well at the end of May after the heavy rains. He himself was lucky to remain free from disease. Not only did he stimulate the expansion of his Gardens for medical purposes but, on 30 October 1652, he was able to provide a meal of real Cape products, such as peas, spinach, asparagus and salad.

The extent to which van Riebeeck cured and prevented this unpleasant disease is quite obvious from the description we have given. Not only the sufferers of scurvy on ships from Holland to the Cape enjoyed the refreshment station, but also those returning from India and touching at the Cape homeward bound, and who had experienced the one-sided rice feeding.

It is Jacobus Bontius (Jacob de Bondt), a Netherlands medical practitioner in the service of the Company, who was also the Physician-in-Ordinary of Jan Pieter'zoon Coen (the Governor-General of Netherlands East India) who described beri-beri in his book on diseases in this far-off country. (In later years the researches on beri-beri of Eykman and de Grijns and later of Jansen and Donath, all Hollanders, obtained international fame.)

While scurvy was one of the principal diseases to be combated, there were also epidemics of measles and dysentery and later, in July 1656, an epidemic occurred, which was so serious that van Riebeeck had to act in his medical capacity as so many people were ill.

The diseases prevalent in the settlement occurred among large masses of Native races which van Riebeeck had to govern. This made his life difficult and the prevention of these ailments was a great task. However, he realized that the development of the settlement required the co-operation of the Natives.

It was quite obvious, however, that although this co-operation was of the greatest importance for good workmanship, van Riebeeck did not succeed in bringing the Natives to a high ethical level. An example of this was narrated by Molsbergen who said: 'A few days prior to his departure, van Riebeeck had the satisfaction of seeing "Eva the Interpretress", a Hottentot girl, being baptized and taken into the Christian faith; that religion and culture were only a cloak was obvious when, after the death of her husband, junior-surgeon Pieter van Meerhof, she lost her balance.' While this may be quoted

3. The Rev. Valentijn visited South Africa in the years 1685, 1705 and 1714 and devoted part of his work entitled *Old and New East India* entirely to what he had observed at the Cape; he gave a complete description of the Gardens there and in 1695 met Hendrik Oldeland, supervisor of the Company's Gardens, who made a list entitled *Herbarius Visus* of flowers and plants.

as an individual case, this fact was reflected in the course of the centuries.

The combating of disease was not van Riebeeck's only trouble at the Cape; he had the greatest difficulty with the Hottentots, and on 14 April 1653 he wrote to the Masters XVII of the East India Company about 'this blunt, fat and lazy, stinking nation', which gave him so much trouble.

Van Riebeeck had hoped that he could finish the settlement in a short time, but it was only after a stay of 10 years at the Cape that he departed for the Far East on 7 May 1662.

As Governor it was difficult to equal him; as a medical man he did much for the health of the Colony. His stay at the Cape was one of the most important events in the history of South Africa.

SICKNESS AT THE CAPE AND ITS TREATMENT IN THE SETTLEMENT

A discussion of the ailments prevalent at the Cape, during the time of Johan van Riebeeck, must distinguish between the illnesses of Europeans living at the Cape at that time and those of the Natives, of whom the Hottentots comprised the largest number. The illnesses from which the Europeans suffered were those which they had already contracted or which were dormant on leaving their homeland; or those ailments which they got on board or which they obtained in this tropical part of the world, through food-upsets and climatic conditions. As it was very unlikely that when they went to South Africa to establish themselves as free citizens, they were carefully examined medically, they would have brought with them diseases occurring in Europe; they were also obviously carriers of the usual bacterial infections.

The sicknesses which they contracted on board ship have already been discussed, and only those diseases of the Europeans who worked with Johan van Riebeeck will now be reviewed.

It is difficult to assume that there was much difference between the diseases of the Europeans and those of the Natives, as both races were exposed to the same pathological circumstances. This opinion is shared by Peter Kolbe in his book *Accurate and Extensive Description of the Cape of Good Hope*. Kolbe was a Doctor of Philosophy and was specially engaged in the study of astronomy. He promoted a thesis entitled *De Natura Cometarum*. His

Fig. 2

great friend was Nicolaas Witsen, at that time the Mayor of Amsterdam.

At the beginning of 1705 he sailed from Texel and arrived at the Cape in the middle of the year. From his friend Nicolaas Witsen he received astronomical instruments and the purpose of his journey to South Africa was, in the first instance, to do geographical studies; but when the money which was sent him from Germany ceased, he became a servant of the East India Company.

In the literature no complete and true medical description of the diseases at the Cape is recorded. Therefore it is necessary to quote from what Kolbe wrote, but medically and scientifically this must be accepted with reservations.

From his summing up of the illnesses it was quite obvious that there was very little difference between the illnesses of to-day and those which occurred during van Riebeeck's Governorship.

Diseases of children were the same as to-day and Kolbe talks about measles and chicken-pox. Fevers often occurred, but it could not be established what the causes of these fevers were. Kolbe writes about dysentery in the minutest detail and ends his long and extensive narrative with a description of scurvy. He discusses the treatment of the various diseases in the same manner as is done to-day.

The Europeans in the settlement were treated by the servants of the East India Company, according to the medical methods learned in Holland. The Natives had their own barber-surgeons and often cured their patients in an unusual manner. When treating stomach, chest or abdominal ailments, medicines were not always given immediately, but in the first instance cupping was applied (Fig. 2). Kolbe describes this as follows:

'He (the barber-surgeon) searches in the first instance for a horn of an ox or a cow, of which there were plenty in the fields, as owing to the shortage of combmakers and other crafts, they were not made use of. He cut the bottom of the horn straight and took off the sharp edges; he sharpened his knife as much as he could, sucked the horn into position where the patient had pain and pressed it so tightly that it was fixed firmly, as in the case of ordinary cupping and the skin became quite numb. After the horn had been fixed for a long time, he pulled it off and with his knife made several incisions in the skin about an inch long and subsequently sucked the horn on it again and it stayed there until it fell off by itself, full of blood. Meanwhile the patient had to lie on his back without moving and had to suffer terrific pain. According to the richness of the blood of the patient or the depth of the cut, sometimes after two hours or more, the abdomen is drawn together to such an extent that the poor sufferer cannot stand the pain any longer and has to pull off the horn.

'When the horn falls off by itself, as sometimes happened, and is full of blood, cupping is not repeated but the patient is allowed to go, so that it can be observed whether a cure has been effected; if the cupping has not taken away the pain, then a draught of herbs is given; if the pain has disappeared but re-appears at another spot, he is anointed with warm fat, and if the pain has not absolutely gone, cupping is repeated.'

Apart from cupping, the Hottentots used venesection. Fig. 3 illustrates the Hottentot method of breast-feeding infants.

Aloe leaves were mostly used for a 'sick stomach'. Aloes were plentiful in the fields. The patients were given a few drops of the juice on a warmed spoon, so that they could have a good purge. If it was not beneficial the first time, after a few days the procedure was repeated (this time stronger), so that after purging for 2 or 3 days and in this manner, the patient was cured.

No account of the diseases of the Natives in the settlement of Johan van Riebeeck has been described in the literature by medical men but only by lay-men such as Kolbe. However, it is of interest to mention below that

Fig. 3

Kolbe tells how the Hottentots have thought out a peculiar and superstitious method to see if the patient is cured or not:—

'Although I have not personally seen it but have heard it from reliable people, I will do my best to narrate same: When someone is ill and medicines have failed to improve the condition and the patient becomes steadily weaker, they apply the following method to see whether he will live or die; namely, they take a sheep and fleece it alive of its skin without shedding a drop of blood; when the skin has been removed they let the sheep loose and await whether it runs away or lies down. If it runs away, they have the superstitious and definite hope that the patient will be cured; but if the animal remains lying down they have no confidence that the patient will survive; subsequently they do nothing more than give him his ordinary food until he dies.'

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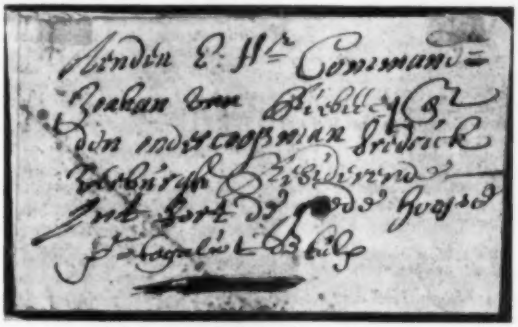
South African Medical Journal
Suid-Afrikaanse Tydskrif vir Geneeskunde

VAN DIE REDAKSIE

DIE VAN RIEBEECK-EEUFEES

Dis vandag presies 300 jaar gelede dat van Riebeeck by die Kaap die Goeie Hoop aangekom het om alhier 'n Nedersetting te stig. As onderchirurg het hy in diens van die Oos-Indiese Kompanjie getree en derhalwe is ons eie belang in die Eeufeesvierings van heel besondere aard. Alhoewel hy naarstiglik gestreef het om na en in die administratiewe diens van die Kompanjie bevorder te word, was sy verband met die geneeskunde geensins net formeel nie. Gedurende die epidemie aan die Nedersetting in 1656 (elders in hierdie uitgawe beskryf) het hy byvoorbeeld weer sy eerste beroep beoefen.



A letter to van Riebeeck at the Cape.

Aan den E: Hr. Commandr. Joahan van Riebeecq ende den onderkoopman Fredrick Verburgh Residerende Int fort de Goede Hoope ende per 't galiot *de Tulp*.
(*From the private collection of Mr. L. B. Goldschmidt, Cape Town.*)

Vanselfsprekend is van Riebeeck se assosiasie met die Kaap onafskeidelik met die geskiedenis van skeurbuik en ander diëetgebrek-toestande verbonde. Soveel verwoesting is deur hierdie siektes op handelskepe aangerig dat 'n Nedersetting by die Kaap in belang van die mensheid sowel as van die handel gebiedend noodsaaklik geword het. Die welslae waarmee die stigting aan die Kaap die Goeie Hoop bekroon is, het blywende hulde aan van Riebeeck se administratiewe en professionele bedrewenheid gebring.

Hierdie gedenkuitgawe van die *Tydskrif* is uitgegee om onsself aan ons chirurg-stigter en aan die geskiedkundige betekenis van die Tuine aan die Kaap te herinner. Ons vertrou dat ons lesers die van Riebeeckana-versameling en verwante onderwerpe beide interessant en leersaam sal vind.

Dit was onmoontlik om 'n faksimilee-uitgawe van al die beskikbare materiaal te druk. Ons was slegs in staat om 'n keuse te maak wat in baie breë trekke van Riebeeck se merkwaardige prestasie en ook sommige van die belangrike mediese ontwikkelings wat daarop gevolg het kan toelig. Die medies-geskiedkundige navraer sal heelwat van die inligting omtrent die eerste hospitale aan die Nedersetting boeiend vind.

Die bereidwillige hulp deur talle vriende en kollegas verleen word hoog op prys gestel. In die besonder, egter, is ons dank verskuldig aan mnr. Nicolaas Kroese van Amsterdam wat ons aandag gevestig het op verskeie van die vroeë landkaarte en dokumente; asook aan mnr. Victor de Kock van die Argief (Kaapstad) wie se onfeilbare vriendelikheid, medewerking en deskundige hulp tot 'n baie groot mate die oplossing van vele probleme in verband met die faksimilee-afdrukke vergemaklik het.

Ook *Photo Process (Pty.) Limited* wil ons bedank vir hul milde geskenk van die gravure wat die kleurplaat van die van Riebeeck-portret in hierdie uitgawe moontlik gemaak het. Om die besondere getrouheid van die reproduksies te verkry was hul tegniese advies en sorg uiters waardevol.

EDITORIAL

THE VAN RIEBEECK TERCENTENARY

Just 300 years ago to the day, van Riebeeck arrived at the Cape of Good Hope to establish a Settlement here. He had entered the service of the East India Company as a junior surgeon, and this makes our own interest in the tercentenary celebrations a very close one. Although he rapidly sought promotion to and advancement in the administrative services of the Company, his association with the practice of medicine was more than formal. In 1656, e.g. during an epidemic at the Settlement (described elsewhere in this issue) he resumed the practice of his erstwhile calling.

Van Riebeeck's association with the Cape is, of course, inseparably bound up with the story of scurvy and other deficiency states. These diseases wrought such havoc in the trading ships of the Company that a Settlement at the Cape became essential, in the interests of humanity as well as of trade. The success with which this Settlement of Good Hope was established became an enduring tribute to van Riebeeck's administrative and professional skill.

In this commemorative number of the *Journal* we remind ourselves of our surgeon-founder and of the historic importance of the Gardens of the Cape. Our readers will, we hope, find interest as well as instruction in this collection of van Riebeeckana and related matters.

It has not been possible to publish in facsimile much of the material available. We have only been able to make a selection which high-lights, in a very broad way, van Riebeeck's remarkable achievement and some of the important medical developments that grew from his work. The information about the early hospitals of the Settlement will provide the inquiring medical historian with much to engage his interest.

Many friends and colleagues gave ready and much appreciated assistance. In particular, however, we would like to express our indebtedness to Mr. Nicolaas Kroese of Amsterdam, who drew our attention to several of the early maps and documents; and to Mr. Victor de Kock of the Archives (Cape Town), whose unfailing kindness, co-operation and authoritative assistance eased very considerably the many problems involved in the facsimile reproduction of much of the material.

We would also express our thanks to Photo Process (Pty.) Limited, whose generous donation of the engravings made possible the colour illustration of the van Riebeeck portrait in this issue, and whose technical advice and care were very important in achieving the remarkable fidelity of the reproductions.

ABSTRACTS

A. Henschel, H. L. Taylor *et al.*: *Experimental Malaria in Man.* (J. Clin. Invest. (1950): **29,** 52-71.)

In three short and interesting papers the authors describe the physical deterioration and recovery in 12 healthy young men who were inoculated with the McCoy strain of *P. vivax* by the intravenous injection of 3 ml. of infected blood. Malaria developed in all cases; during each paroxysm of fever the patients were confined to bed and provided with excellent medical and nursing care.

After five to eight paroxysms the malaria was terminated without incident with quinine sulphate. On the morning of the third day following the last paroxysm the subjects were returned to the standard activity routine, and various functions were regularly tested at frequent intervals until they had returned to or approached the control values.

The findings may be summarized as follows: 1. Blood haemoglobin concentration was reduced an average of 3.3 gm. per 100 ml. of blood. Total plasma volume was not changed. Complete recovery of the haemoglobin required about four weeks.

2. The pulse rate during a work test of moderate severity was increased 26.9 beats per minute and recovery rate 29.7 beats per minute on the third post-febrile day; normal values were obtained three weeks after the malaria.

3. Maximal oxygen intake was decreased 18.9% on the fifth post-febrile day. About six weeks were required for recovery of the function.

4. Maximal performance capacity was depressed until the eighth post-febrile week.

5. Cardiovascular stability deteriorated about 50% during the malaria but was essentially normal three or four weeks after the malaria.

6. Systematic evaluations of liver function were made from measurements of plasma bilirubin and urobilinogen, cephalin-cholesterol flocculation and thymol turbidity in the serum, and bromsulfalein excretion tests.

7. Prompt and delayed reacting plasma bilirubin rose, respectively, from mean control values of 0.069 and 0.76 mg. per 100 ml. to 0.19 and 1.39 in the first paroxysms of fever, and to means of 0.20 and 1.60 in paroxysms 4 through 7.

8. Bilirubinuria did not occur.

9. Urobilinogen excretion rose progressively from a control average of 1.16 Ehrlich units in two-hour collections to a mean of 2.73 units in the first febrile stages and a mean of 5.59 units for fever paroxysms 4 through 7.

10. Both plasma bilirubin and urobilinogen excretion returned to normal within a week from the start of quinine.

11. In malaria the liver had a load of about four times the normal amount of degraded haemoglobin to dispose of and it was concluded that the plasma bilirubin values found here represented only a moderate degree of actual impairment of the liver.

12. None of the liver function test results showed a significant correlation with either the actual body temperature at the moment or the total fever.

13. Electrocardiograms (three standard leads) were recorded from 12 men before blood-induced *vivax* malaria and on the second and 21st days following termination of the disease.

14. Quantitative analysis showed that 12 out of 14 items measured were significantly changed by malaria, including a general tendency to depression of T and of the ST segment in lead II and III and, in the upright posture, a large shift of the T axis to the left.

15. Twenty-one days after malaria significant alterations from the pre-malaria control persisted in five electrocardiographic items.

16. Although most of the changes were statistically highly significant, they occurred within the so-called normal limits.

Two questions arise in connexion with these interesting papers.

(a) It is stated that malaria was terminated with quinine sulphate, without incident; the quinine was continued for 21 consecutive days. There were no relapses or recurrences. One wonders why the amount of the daily dosage of quinine is not mentioned anywhere in the papers and why the drug was continued for 21 days, as it is well known that blood-inoculated malaria (where one has to deal with trophozoites only, not with sporozoites or exoerythrocytic forms) *never* relapses after administration of 4 to 5 gm. of quinine in as many days. A three-weeks treatment is quite superfluous.

(b) It is mentioned that the Korteweg initial temperature rise was observed in three subjects at 11, 25, and 8 hours, respectively, after inoculation of the parasitized blood. As a matter of fact, such a very early rise of temperature has nothing to do with the malaria parasites, but is caused by the injection of foreign protein. Korteweg's initial remittent fever occurs about one week after intravenous inoculation, about 12 to 14 days after subcutaneous inoculation and about 9 to 13 days after exposure to mosquito bites. Moreover, it only occurs in non-immune persons.

Goldman, M. J. (1950): *Quinidine Therapy of Auricular Fibrillation.* Amer. Heart J., **40,** 93.

After a few trial methods, the author arrived at his present method of quinidine administration which is as follows. After a sensitivity test with 0.2 gm., the patient is started on 0.2 gm. every two hours for five doses. The individual daily dose is raised to 0.4 gm. the second day and to 0.6 gm. the third day. This latter dose is then maintained for three days. If auricular fibrillation or flutter still persists the dosage is increased to 0.8 gm. Occasionally an extra dose is given at midnight to maintain a high blood level. It is essential that the attending physician should check with the patient prior to each increased dose of quinidine, questioning for symptoms of toxicity and carefully recording the heart rate, the rhythm, and the blood pressure. At present, quinidine blood levels are being determined at the times of appearance of auricular flutter and of conversion to a regular sinus rhythm. Too few of these have been done to date to warrant inclusion in this study.

Following conversion to normal rhythm the required maintenance dose varied considerably. In the average patient, 0.4 gm. four times daily maintained a regular sinus rhythm.

The author summarized his experiences as follows:

1. Auricular flutter is a common result of quinidine therapy given for conversion of auricular fibrillation to normal sinus rhythm.

2. The appearance of auricular flutter is in itself not a contraindication to continue quinidine therapy. In most instances if the dosage of quinidine is maintained or increased, conversion to a regular sinus rhythm will result.

3. Cardiac enlargement and congestive heart failure in themselves are not contraindications to quinidine therapy. The danger of embolic phenomena remains a possibility, but since this occurs even more commonly if the auricular fibrillation persists, it cannot be considered a definite contraindication.

Pernicious Anaemia and Related Anaemias treated with Vitamin B_{12}. E. Jones, W. J. Darby and J. R. Totter (1949): Blood, **4,** 827.

Eleven cases treated with Vitamin B_{12} were reported with blood charts. Eight patients with pernicious anaemia in relapse responded haematologically. Two patients with mild neurological involvement were relieved by therapy with B_{12} alone.

Less than about 0.75 micrograms Vitamin B_{12} daily in doses at intervals of several days did not suffice to maintain blood values as high as does adequate treatment with liver extract. The maximum rate of haemopoiesis may require the initial average daily dose of approximately 3 micrograms.

The reticulocyte count is an unreliable quantitative criterion of activity or adequacy of therapy.

Haemopoietic factors in addition to folic acid and B_{12} may be required by some patients to obtain maximum erythrocyte levels.

Vitamin B_{12}, as well as folic acid, reduces the faecal urobilinogen output of pernicious anaemia patients. The significance of this finding is discussed. No change in urinary excretion of pteroylglutamate or of porphyrin was detected in patients treated with Vitamin B_{12}.

"THIOSULFIL"

Ayerst

FOR THE TREATMENT OF

URINARY TRACT INFECTIONS

RAPID, UNIFORM, AND COMPLETE ABSORPTION from the intestinal tract is demonstrated by the presence of "Thiosulfil" in the blood thirty minutes after the ingestion of 2.0 Gm. Maximum concentration is attained with this amount in two hours, with blood levels of from 3 to 6 mg. per cent. It is rapidly eliminated, and in seven to eight hours less than 1.0 mg. per cent is found in the blood. In children, absorption is even more rapid; higher peaks of concentration are obtained, and fast excretion[3].

EXCRETION IS SO RAPID that 85 to 100 per cent is recovered from the urine in a period of ten hours[3]. "Thiosulfil" is excreted almost entirely in the free form, only 5 to 10 per cent appearing in the acetylated form. In contrast, the excreted acetylated forms of sulfapyridine are 20 to 40 per cent[4], sulfathiazole, up to 20 per cent; and 3,4-dimethyl-5-sulfanilamidoisoxazole, 28 to 35 per cent. Renal clearance is high and is greater with "Thiosulfil" than with other sulfonamides, being only about 10 per cent under creatinine clearance.

"STRIKING ABSENCE OF SIDE-EFFECTS notwithstanding the relatively large dose given to children" is a typical conclusion of clinicians experienced in the use of this drug. This is a conspicuous feature of "Thiosulfil" therapy.

URINARY TRACT INFECTIONS require a high concentration of sulfonamides in the urine. "Thiosulfil" accomplishes this effectively with frequent administration of small doses. Actually, 2½ to 5 grains of "Thiosulfil" five or six times daily is as effective as other sulfonamides at a much higher dosage level[1]. The exceedingly small dosage required keeps the blood concentration very low, greatly minimizing the possibility of renal damage, sensitization, leukopenia, etc.

The sulfa drugs have a much wider bacterial spectrum than the antibiotics, particularly in genito-urinary diseases. In one series of urinary tract infections due to *E coli*, *Ps pyocyaneus*, and *S. aureus*, failures were seen only in mixed infections, in the presence of an obstruction, or resistance to sulfonamides as well as the antibiotics. Only 0.6 Gm. daily was given over periods of 3 to 23 days.

TOXICITY: Rapid excretion due to great solubility and low degree of acetylation, together with the small dosage required, account for the striking lack of toxicity and infrequency of side effects. In a large series where "Thiosulfil" was used locally in dermatosis and pyogenic infections over a period of 18 months, it was concluded that the drug is efficient, non-irritating, and non-toxic.

There is always a risk of sensitization in allergic individuals, but, because of the low dosage and rapid elimination of "Thiosulfil", such reactions are not as serious as those frequently observed following other sulfonamide therapy.

Of 300 cases followed over a long period, there was no neuritis, hematuria, renal complications, exanthema, icterus, or pyrexia, and no significant changes in hemoglobin concentration or leukocyte count.

DOSAGE: Adults—1 to 2 tablets (0.25 to 0.5 Gm.) 5 or 6 times daily.
Children—½ to 1 tablet (0.125 to 0.25 Gm.) 5 or 6 times daily.

Note: Fluid intake should be limited, and if the patient voids at night an extra tablet should be given. In most cases 5 tablets daily will be sufficient to render the urine sterile in 5 or 6 days.

AVAILABILITY: Each scored tablet contains 0.25 Gm. sulfamethylthiodiazole. Supplied in bottles of 100.

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ARCHIVES FOR A HISTORY OF MEDICINE IN SOUTH AFRICA

VAN RIEBEECKANA AND RELATED MATTERS

COMPILED BY THE EDITOR

Fig. 1. The house of Jan van Riebeeck's grandparents (van Gaasbeek) in Culemborg. Van Riebeeck's grandfather was the Burgomaster of Culemborg.

Fig. 2. The Town Hall, Culemborg, completed in 1534.

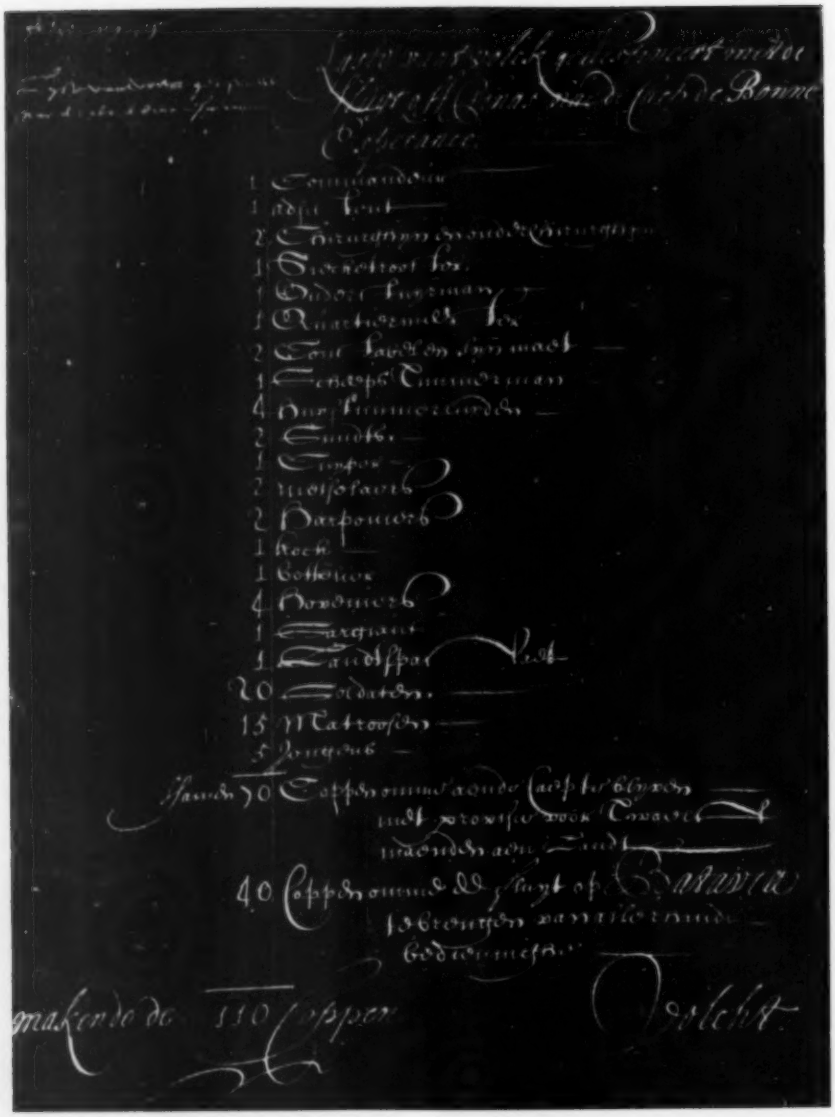
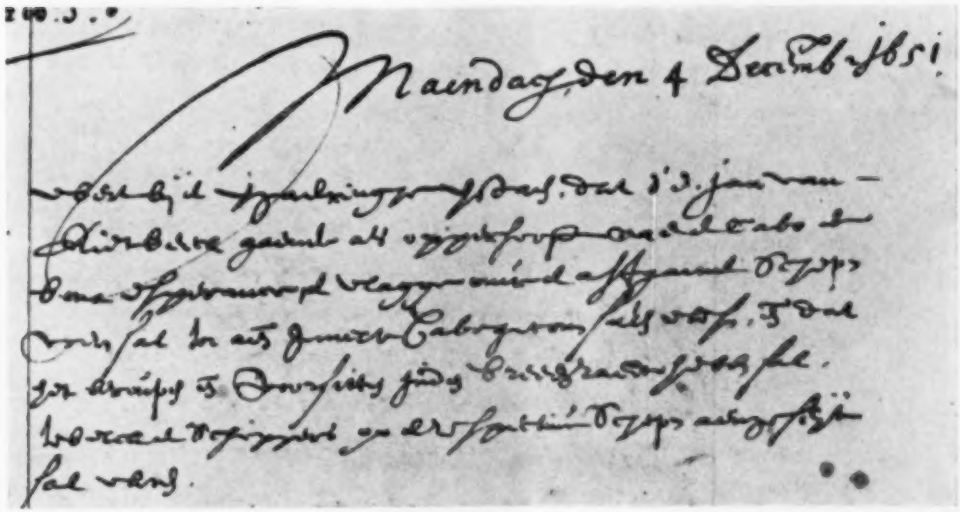


Fig. 3. Extract from the Register of the Resolutions of the Chamber of XVII, setting out the personnel destined for the Cape of Good Hope.

Lijste vant volck gedestineert met de fluyt off pinas nae de Caep de Bonne Esperance.

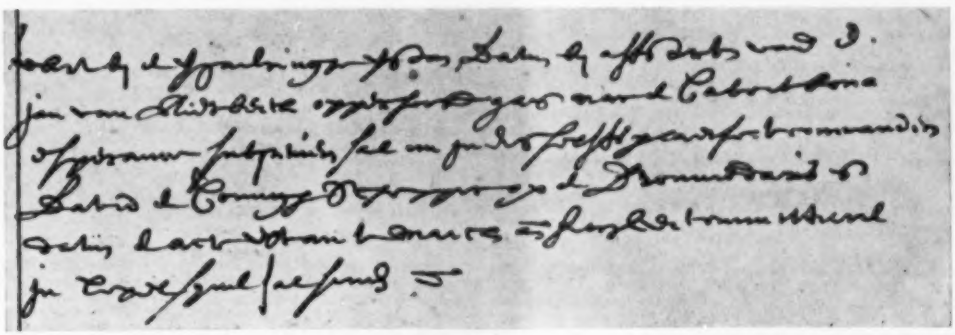
1	Commandeur
1	Adsistent
2	Chirurghijn en onderchirurghijn
1	Siecketrooster
1	Onderstuyrman
1	Quartiermeester
2	Constabelen sijn maet
1	Scheeps Timmerman
4	Huystimmerluyden
2	Smidts
1	Cuyper
2	Metselaers
2	Harponiers
1	Kock
1	Bottelier
4	Hoveniers
1	Sargiant
1	Landtspassaet
20	Soldaten
15	Matroosen
5	Jongens
tsamen 70	Coppen omme aende Caep te blijven met provisie voor Twaelff maenden aen Landt
40	Coppen omme de fluyt op Batavia te brengen van allerhande bedieninghe
makende 110	Coppen



Maendagh den 4 December 1651

Wert bij de vergaderinghe verstaen dat d'E Jan van Rietbeeck gaende als opperhooft nae de Cabo de bona Esperance d'vlagge over d'affgaende schepen voeren sal tot aen de gemelte Cabo gecomen sullen wesen ende dat het beroupen ende voorsitten in den breeden raedt hebben sal, welck de schippers op de respective schepen aengeseyt sal wesen.

Fig. 4. Extract from the Resolutions of the Kamer Amsterdam of the East India Company, dated 4 December 1651, appointing van Riebeeck in charge of the expedition to the Cape. (From the *Inventaris Archief*, V.O.C. No. 363, in the Archives at the Hague).



Wert bij de vergaderinghe verstaen dat men bij affsterven van d'E Jan van Rietbeeck opperhooft gaende nae de Cabo de bona Esperance substitueren sal om in desselffs plaetse te commanderen David de Coningh schipper op de Drommedaris ende dat men daer extract (?) maicken aen de Heren gecommitteerden, in Texel sijnde, sal senden.

Fig. 5. Extract from the resolutions of the Kamer Amsterdam, dated 14 December 1651, appointing the captain of the *Drommedaris* as Van Riebeeck's successor, in the event of his death. (From the *Inventaris Archief*, V.O.C. No. 363, in the Archives at the Hague).

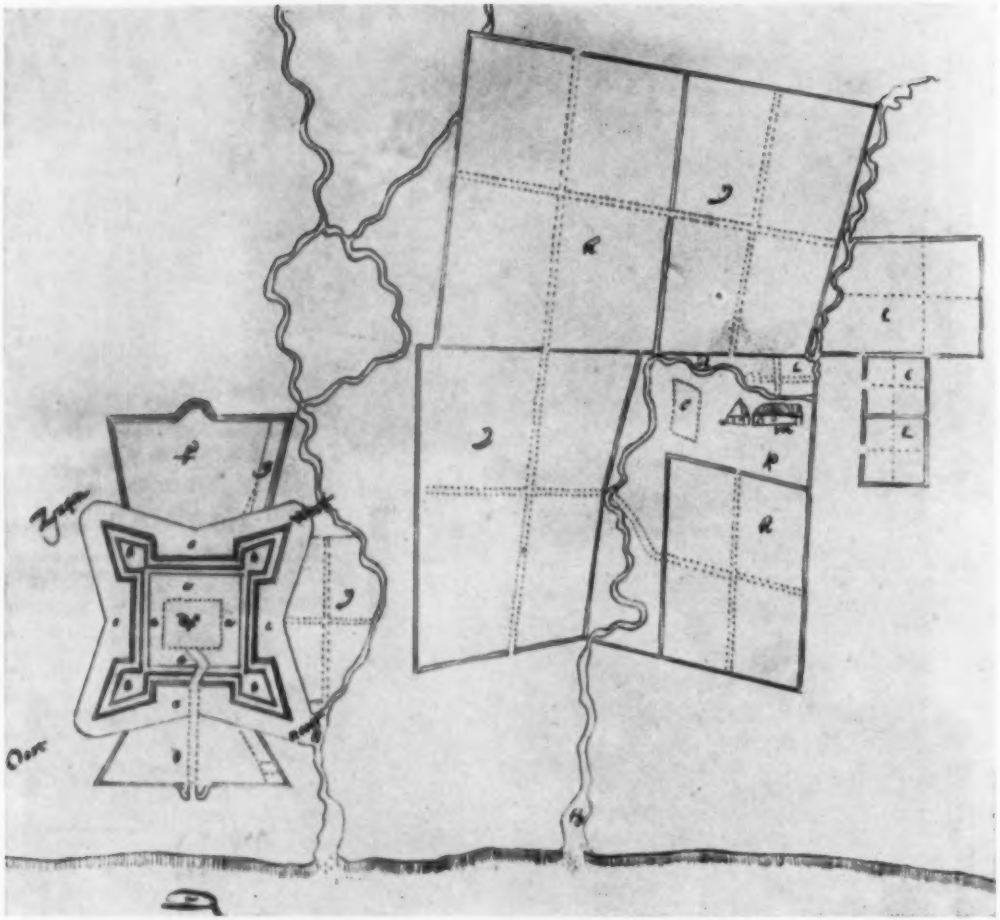


Fig. 6. One of the earliest maps of the Settlement at the Cape (1654). From the collection in the Rijks Archief, The Hague, Holland, through the courtesy of Mr. Nicolaas Kroese, of *d'Vijff Vlieghen, Ao.* 1627 (*the Five Flies*), Amsterdam, Holland. The river on the left, which runs past the Fort, is near present-day Plein Street, the Fort itself being at the north-western end of the Grand Parade. This stream was known as the Fresh River, and was a source of fresh water for shipping as well as the occupants of the Fort. At its mouth, the pier or jetty was subsequently built (*Fig. 9*). The stream on the right (carrying stormwater from the mountain side) derived its main supply from a fountain still in existence at *Waterhof*, near the top of Hof Street, whence to this day it flows down through the grounds of the Hof Street Nursing Home and the Mount Nelson Hotel, and then down Government Avenue in the Gardens, to dip under what is to-day the Adderley Street region, finding an outlet to the sea.

a Houses; *b* Bastions of the Fort, named after the ships of van Riebeeck's fleet (N *Reyger*; O. *Walvis*; W. *Oliphant*; Z *Drommedaris*); *c* Moat; *d* Hornwork in front of the Fort; *e* Smithy; *f* Cattle pen; *g* Stables; *h* Fresh-water rivers; *y* and *l* Gardens; *k* Projected gardens; *m* Gardener's house; *n* Adjoining poultry run; *o* Projected duckpond; *p* Farmyard; *q* Beach; *r* Dung pit.

This map shows the sketch plan of the first farm.

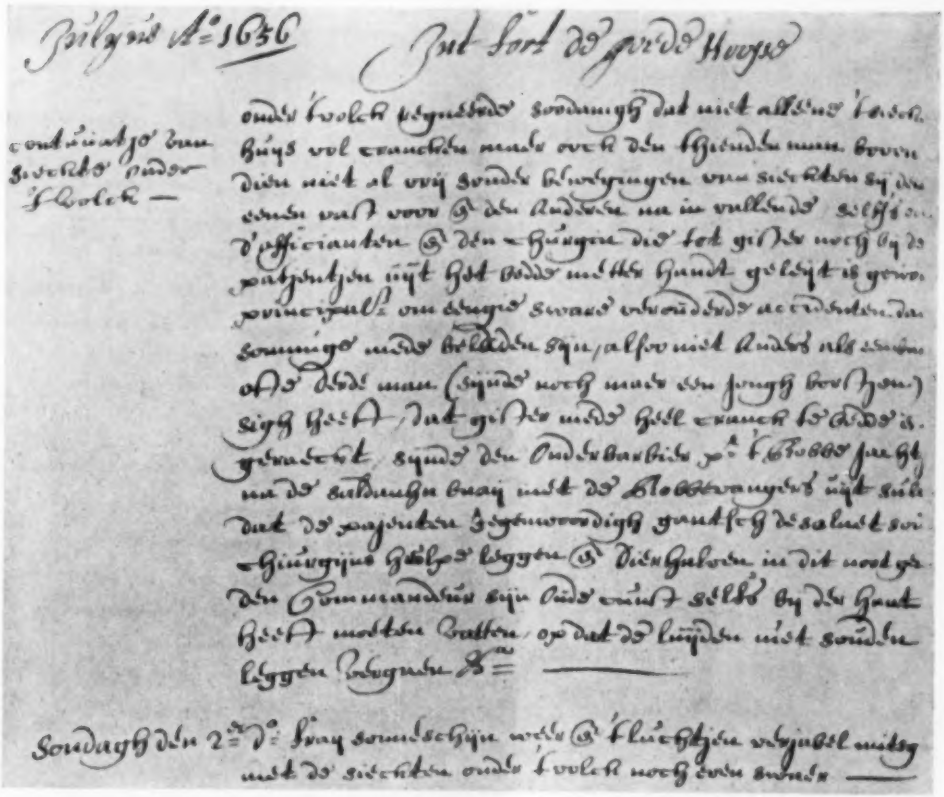


Fig. 7. From van Riebeeck's *Journal*—1 July 1656. This passage refers to an epidemic of illness in the settlement. Translated, the relevant passage reads:

July, 1656.
Illness among the men continues

. . . the illness among the men which is spreading daily so that the hospital is full; one out of ten is ill, one after the other taking ill, even the officers and the surgeon, who until yesterday had been led by the hands to see his patients, especially those suffering from old complaints. He had only one barber or third man to assist him, a young lad, who also fell ill yesterday. The junior surgeon (onderbarbier) has gone to Saldanha Bay with the seal-hunters, so that the patients are at the moment totally deprived of attention by a surgeon, with the result that the Commander has been obliged to revert to his old profession in this emergency so that these men shall not be left to die.

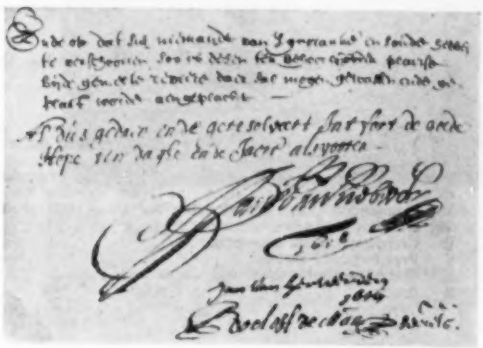


Fig. 8. An early resolution of the Council of Policy, dated 26 August 1656 (C.I., p. 185), laying down one of the first public health measures in the Settlement. It refers to pollution of the fresh-water supply.
Ende op dat sich niemandt van Ignorantie en soude hebben te versthoonen soo is desen ter behoorlijcker plaetse bij de gemelte reviere daer sal mogen gewassen ende geplast worden aengeplackt——
Aldus gedaen ende geresolveert Int fort de Goede Hope van dagh en de Jaere alsvooren.

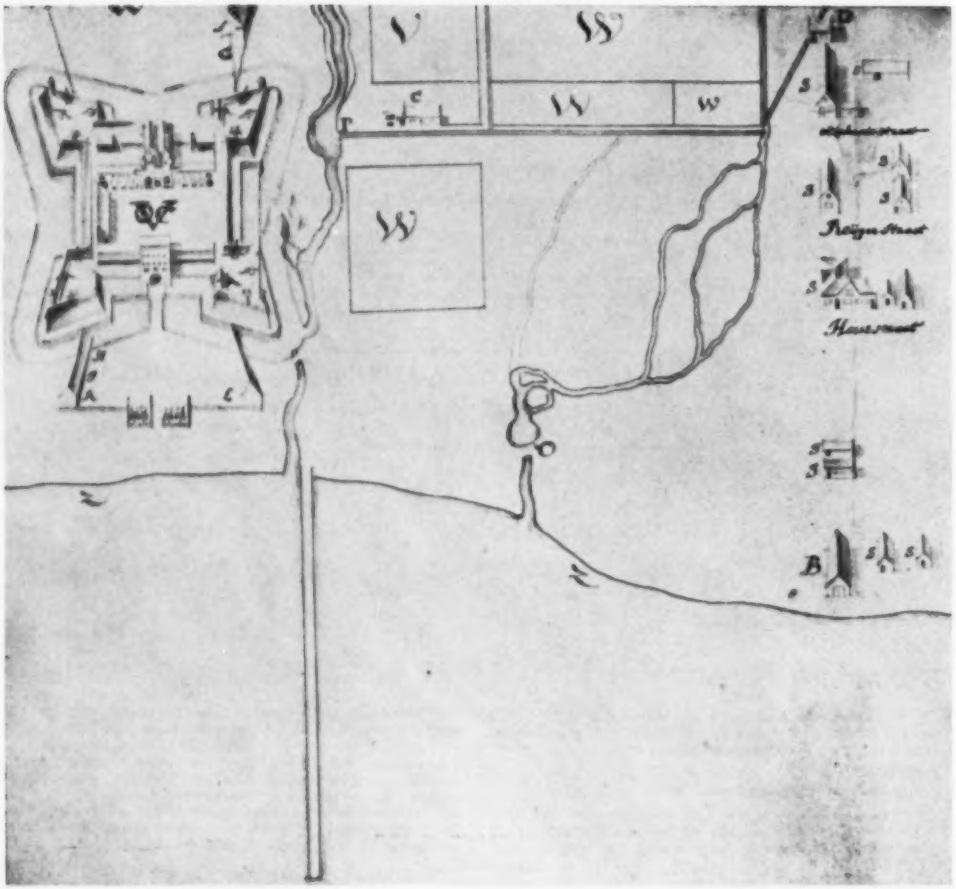


Fig. 9. The Settlement *circa* 1659. From the collection in the Rijks Archief, The Hague, Holland, through the courtesy Mr. Nicolaas Kroese, of *d'Vijff Vlieghen, Ao.* 1627 (*the Five Flies*), Amsterdam, Holland. This map shows the pier or jetty at the mouth of the Fresh River as well as the Hospital (H) in front of the Fort. The houses of the free burghers are marked (S), the Company's Gardens (V) and the gardens of the free burghers (W). Heere Straat is now known as Castle Street. Reijger Straat has disappeared. Olifants Straat, named after one of the ships of van Riebeeck's fleet to the Cape, is the present-day Hout Street. What was to become the Heerengracht (i.e. Adderley Street) can be seen developing at right angles to the afore-mentioned streets.

C Gardener's house let to a free-burgher tailor.
G Company's new cowshed and sheepfold, within the cattle pen or kraal behind the Fort.
H Hospital.
I Company's plough- and wagon-maker's shop.
K Smithy.
L Company's Kitchen for the common people and the slaves.
P Fresh-water river which runs into the Company's garden.
Q Canal to lead water from the Fresh (Sweet) River.
V Company's Gardens, extending for about 100 roods.
W Gardens of the free burghers.
D Company's water corn-mill.
S Free burghers' houses.
B Company's cable shed.
Z Beach.

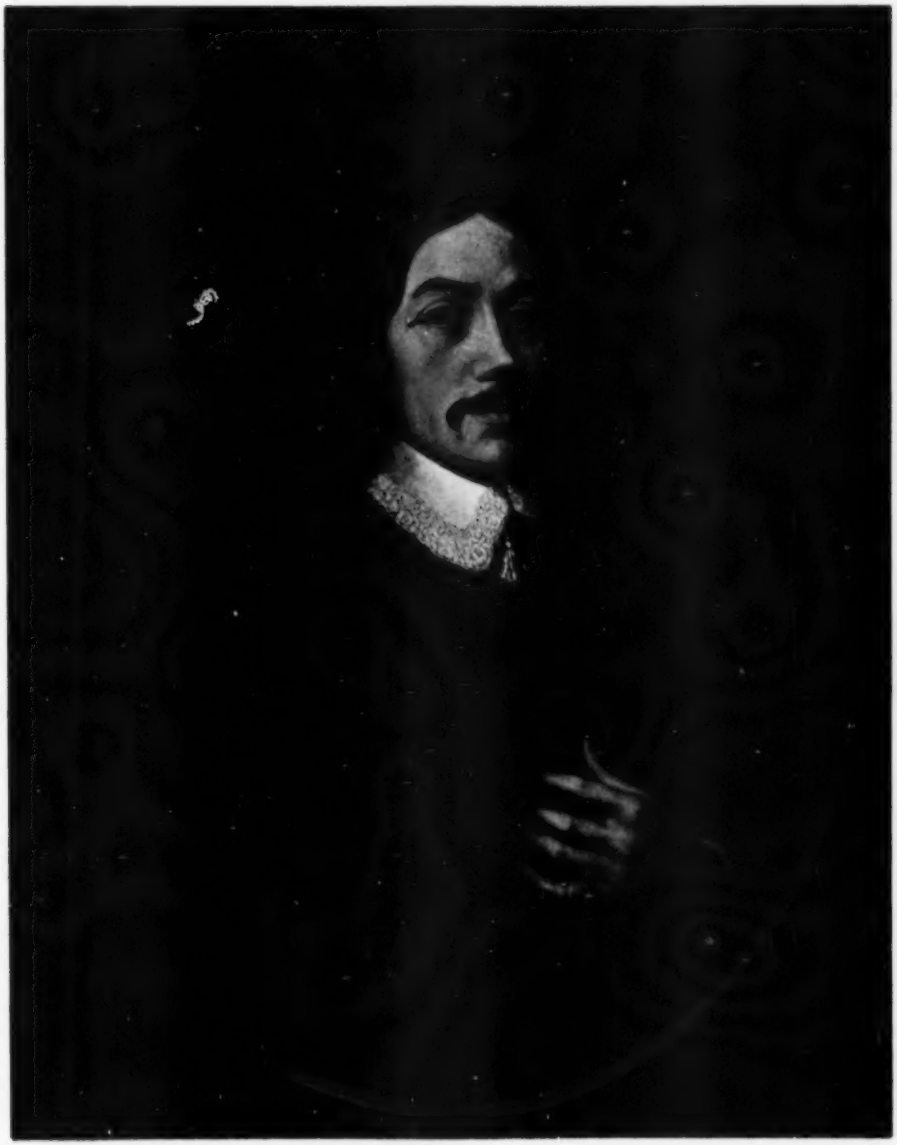


Plate I. Jan van Riebeeck, from the portrait painted by Dr. J. P. Veth in 1898. (From the private collection of Dr. F. W. F. Purcell, Cape Town. Colour plates engraved by Photo Process Pty. Ltd.)

Fig. 10. From the collection in the Rijks Archief, The Hague, Holland, through the courtesy of Mr. Nicolaas Kroese of *d'Vijff Vlieghen, Ao.* 1627 (*the Five Flies*), Amsterdam, Holland.
Growth of the Settlement at the Cape, *circa*, 1695. The early development of Rondebosch, Constantia and Hout Bay.

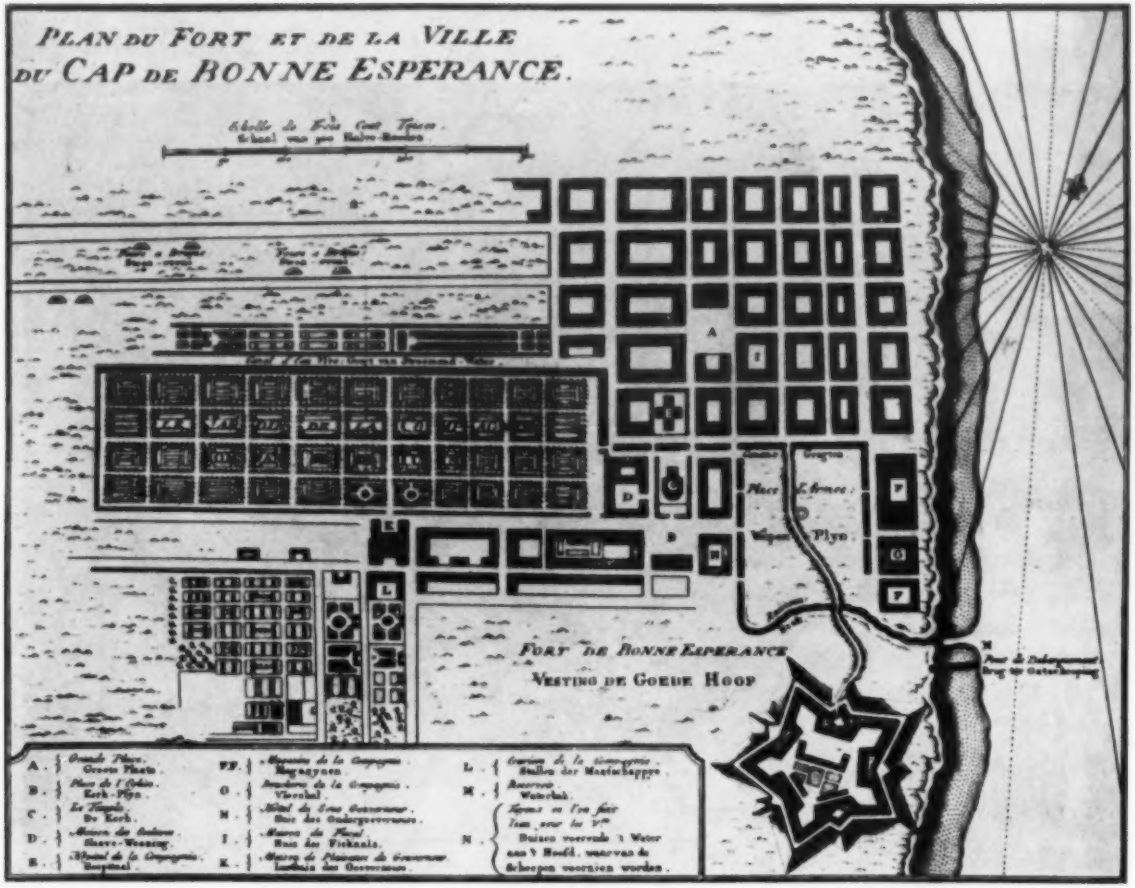


Fig. 11. Map of the settlement in the early 18th Century, printed by Daumont of Paris. From the collection of Mr. Nicolaas Kroese of *d'Vijff Vlieghen, Ao.* 1627 (*the Five Flies*), Amsterdam. The Hospital (E) was built by Simon van der Stel and the Castle, with its five bastions (the construction of which was begun shortly after van Riebeeck's departure) occupies its present-day position.

A DETAILED PLAN OF THE HOSPITAL

(From O. F. Mentzel's *Beschreibung des Vorgebirges der Guten Hoffnung*, Vol. I, p. 171.)

This hospital (Fig. 12) was erected by Simon van der Stel. It was next to the Company's Gardens, facing the Heeren-Gracht (Adderley Street). Shaped like a Greek cross, it could hold at least 400 patients.

It is on part of this site that Dumbarton House (one of Cape Town's 'Medical Centres') has been built.

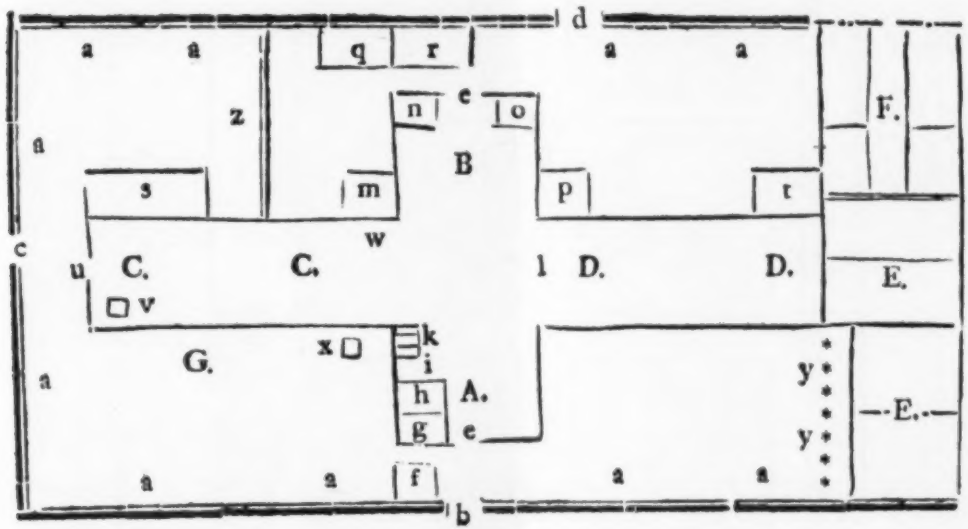


Fig. 12

a, a, a, a The wall around the hospital; formerly it was enclosed by a ditch only.
b The main entrance. This was in the Heeren-Gracht, now Adderley Street, facing the present Dutch Reformed Church.
c A side entrance opposite the Company's Gardens.
d A back entrance facing a road (the present-day St. George's Street).
e The main entrance through the portico into the Hall. The back exit opposite is also marked e.
f The porter's lodge.
g An apartment for the bookkeeper.
h A dark room formerly occupied by the porter.
i The mortuary.
K The staircase.
A The hall: a sermon is preached here every 14 days.
l Here the evening prayers are read, but not the morning prayers.
B The infirmary or surgery. The mild cases are accommodated upon benches but heavily wounded or seriously sick persons lie upon 'catels'.
m A house for the 'Schaaf-Baas' or food-inspector of the hospital.
n The dispensary.
o The operating theatre.
p The kitchen and the cook's quarters.
q The apothecary's dwelling.
r The laboratory.
s The 'Poccage' or ward for venereal diseases.
t The residence of the under-surgeon.
u A door opening on the courtyard.
v The sudatorium (sweating box).
w The sub-inspector's quarters.
x The bell which hangs from a trestle. It is rung at nine in the morning and at three in the afternoon as a signal for meals; it rings again between nine and half-past nine at night to indicate bed-time.
yy Palisades in front of the principal doctor's house.
CC Wards: the convalescents and those suffering from minor ailments lie upon benches; serious cases are arranged in two rows upon 'catels'.
DD These are wards for patients who have been some time in the hospital; they are removed to make room for newcomers in the other wards; they are accommodated in the manner aforementioned.
E The residence of the principal doctor who also acts as the chief surgeon.
F The house of the second doctor and under-surgeon.
G A court-yard planted with beautiful and shade-yielding Amacqua trees. There are many benches where the convalescent rest and enjoy the fresh air. It is the porter's duty to warn them not to stay out too long in the open lest the keen air might prove injurious to them at the commencement.
Z A cross wall that partitions a small court from the rest of the grounds.

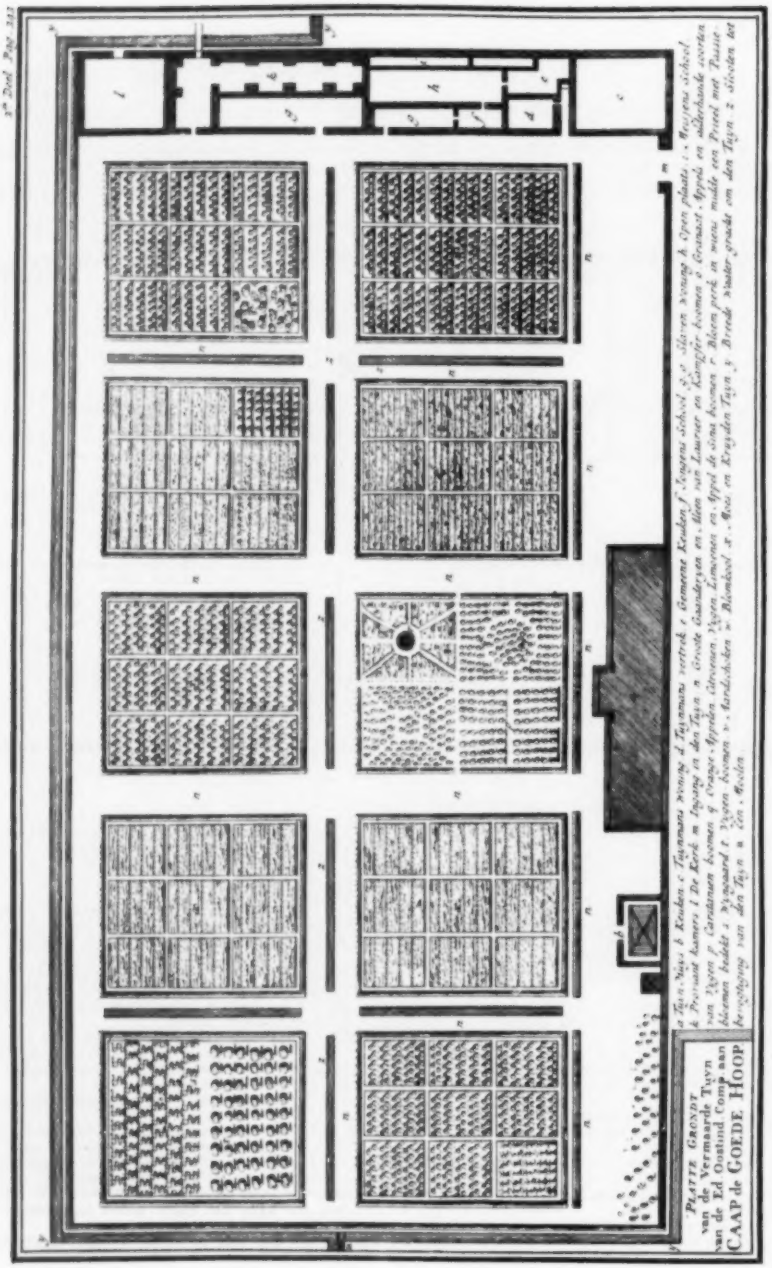


Fig. 13. Detailed plan of the Cape Gardens. From Peter Kolbe's *Beschryving van de Kaap de Goede Hoop* (Amsterdam, 1727), Vol. 2, p. 243.

Fig. 14. From Kolbe's *Beschryving van de Kaap de Goede Hoop* (Amsterdam, 1727), Vol. 2, p. 4. How Newly-born Infants were treated with cow dung by the Hottentots at the Cape.

Indien het kind levend voor den dag komt zoo wassen zy of baden het niet met eenig water, zeggende, dat sulks SIEKUM of ongezond is; maar zy hebben een heel andere en byzondere manier, het zelve van zyne vuiligheid en met zich gebragte onreinigheid te zuiveren: schoon het naar onze in Europa gebruikelyke wyze eerder zoude heeten, dat zy het vuiler maakten, als het van natuur is; door dien zy in plaas van water, of 't geen men anders zoude konnen nemen, om eerst gebore kinderen te zuiveren, verschen koedrek nemen, en wassen het over en over daar mede af, zoo dat het gantsche kind daar mede als geparmufeert is, en zoo groen als gras lykt.

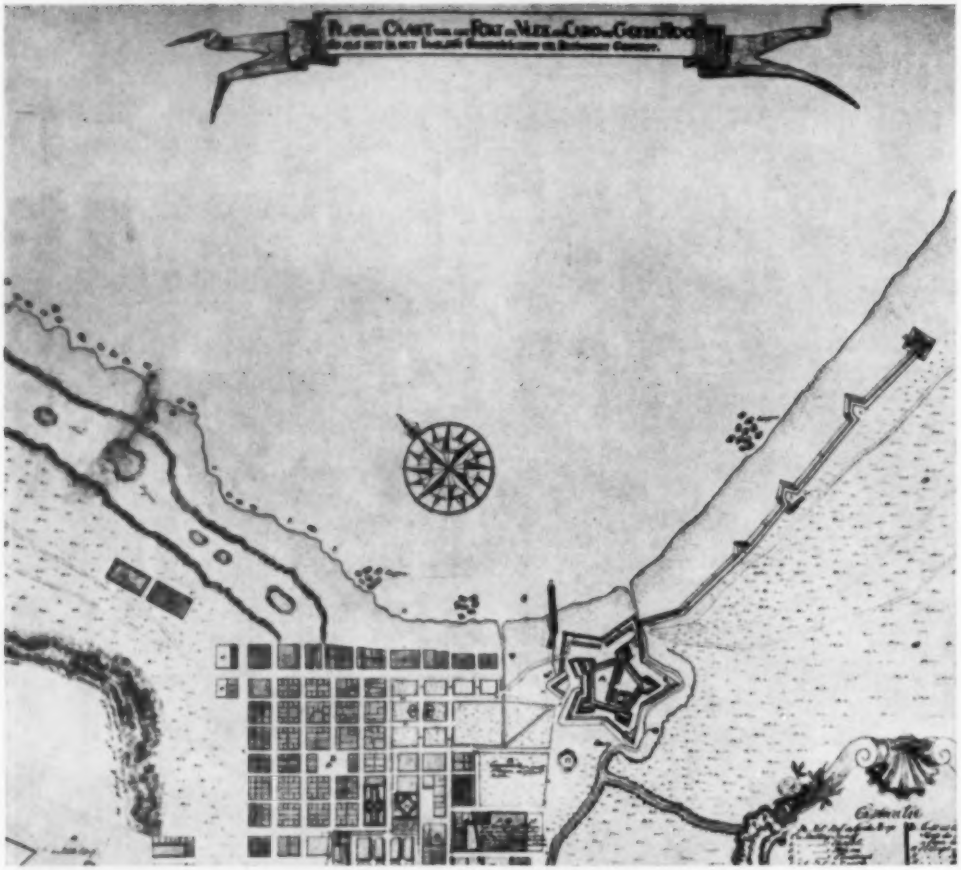


Fig. 15. The settlement in 1767. The cruciate Hospital can be seen facing the Heeren-Gracht.

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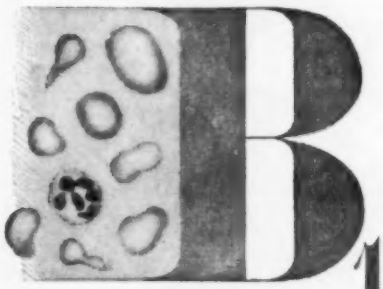

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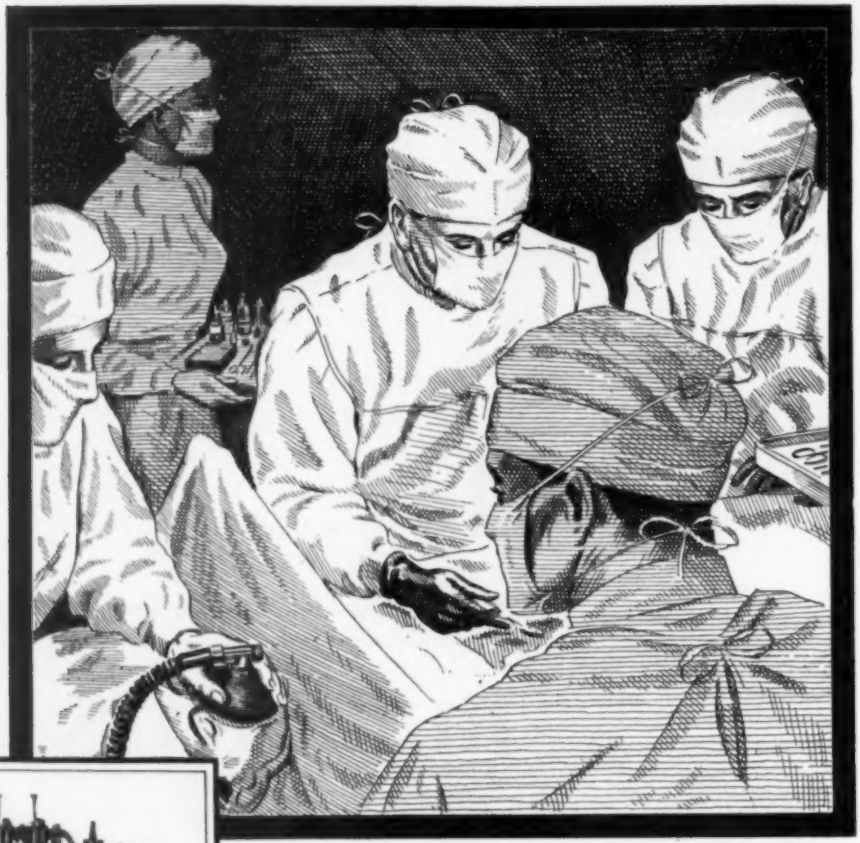

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THE HISTORY OF SCURVY

J. M. HICKLEY, M.B., CH.B.

and

B. BRONTE STEWART, M.D.

Groote Schuur Hospital, Cape Town

It is somewhat of a paradox that the City that was started in 1652 to combat scurvy, should 300 years later provide material for one of the largest series of scurvy published in recent times.

An unfortunate disaster began this story. In 1648 the *Haarlem* was wrecked on its outward voyage to the East Indies. The crew remained at the Cape for a whole season until they were picked up by the return fleet, amongst whom was one, a ship's surgeon, Johan van Riebeeck. Two of the shipwrecked crew, Leendert Jansz and N. Proot, submitted *A Short Exposition of the Advantages to be Derived by the Company from a Fort and Garden at the Cape of Good Hope.*[1]

The director of the Company asked for van Riebeeck's opinion of their exposition. Having remained on shore only long enough to ship the *Haarlem's* goods and crew, he felt that he could add but little more.

'If as Leendert proposes, you order your ships to touch at the Cape, I believe that a great deal of preserved provisions would be economised on the outward voyage and likewise wine; for if they pass without touching, they do so for the sake of premium; the consequence is that the crews are put on short water allowance and the meat and pork are boiled in salt water. Very little fresh water is given to the crew to drink, but one or two glasses of wine are distributed to make up for it and though the wine is a cordial and strengthening, the sailors remain not the less subject to scurvy and similar diseases in consequence of the staleness of the food. But refreshed at the Cape, the voyage can, with God's blessing, be safely made to Batavia with the ordinary provisions and wine allowance and fresh water, by which the company would be greatly benefited, securing the health of the men, and saving a great deal of preserved provisions which are everywhere required in India, whilst now they are consumed by the crews with the least benefit to themselves.'[1]

The beautiful and fertile 'Table Valley' was unfortunately drought-stricken when van Riebeeck arrived in April 1652. The enfeeblement of the men by the voyage and this absence of fresh food on arrival considerably slowed the construction of the Fort. At one time fresh meat was obtained from a hippopotamus killed in the Salt River.[2]

Progress, however, was surprisingly rapid as, in the season two years later, no fewer than 21 ships were revictualled with fresh vegetables on their voyage Eastward. Some of these ships had lost as many as 50 men and when they dropped anchor they had over 100 helpless with scurvy.[3]

The frequency of the callers increased. Amongst these were two English ships. One had been at sea for 8 months since leaving the port of London, the crew almost helpless with scurvy. The very ill were hospitalized but the remainder were supplied with fresh vegetables and meat at the cost of twopence a day, per man, to the British East India Company.[4]

A letter dated 18 October 1658 was written by J. J. Houtschip and J. Syms on board the *West Vriesland*, stranded, having left Holland 5 months before, with a crew of 351 men.[5]

'We cannot refrain from informing you of the miserable condition of the crew, of which 72 are already dead and 150 men very ill of scurvy. Though brought on shore here, we shall not be able to obtain sufficient refreshment for them, as no Natives or cattle have been met by our men sent inland for the purpose. We therefore request you to assist us with vegetables and fruit, as you may deem necessary for our condition. We sent you a letter with the *Penquin* but she could not leave. We cast anchor on the 14th in Saldanha Bay, and so weak-handed that we could not even furl the sails. . . .'

This gives one an idea of the straits to which they were reduced and one can credit the story of a Spanish galleon adrift on the ocean with every man dead from scurvy.[6] Without doubt, then, these early navigators were of the opinion that scurvy originated from a dietary inadequacy and that fresh food was the cure.

An excellent description of the clinical features and treatment of scurvy is found in a report issued to the Chamber of Seventeen of Amsterdam on 23 January 1696.[7]

'You mention that you read with great discomposure in our letter of 30 January 1695, the great number of deaths on board the outward bound ships and the equally great number of sick, and that we are to give you the reasons. . . .'

Apart from accidents, exposure, 'army' diseases, dirty and wet clothing the following appears:

'. . . Then there is the unvaried consumption of salt meat and pork and especially of grey and white peas which are the daily pot food, and by the length of time become musty in the hold—whilst the beer likewise becomes sour. All this old pot food losing its nourishing qualities, and unable to nourish a labouring man in proportion to what he requires, labouring as he does in the heat of the day, finally weakens him so much that he becomes sleepy and lazy, and in the end gets the scurvy. They lose their appetite, blue knobs and blotches cover the whole body, the gums rot, the patients become shivery, are feverish and fall into fainting fits, from which dysentery results. They lose heart from want of nourishment, take to their beds, and all germs of strength failing them, they die. This is the unanimous testimony of all the chief surgeons, given by order of the Governor.'

But this report goes on:

'To prevent these diseases as much as possible, good nourishing food is required and the ships should, better than hitherto, be supplied with barley, plums, raisins and currants, which, boiled together with a good deal of mum * and now and then some Spanish wine, and given to the men morning and evening, would be wholesome food.'

This report was issued following the loss of men on two ships in 1693. The *Bantam* had lost 221 men from scurvy in February whilst the *Goude Buys* 5½ months out from Holland dropped anchor in St. Helena Bay with not a dozen of the crew capable of working.[3]

The seventeenth century closed, then, with the anti-scurvy settlement at the Cape in full working order, with

* A strong sweet beer.

better ship construction shortening the voyage from Europe to 90-100 days but with scurvy still causing havoc amongst seamen.

This conception of a settlement at the Cape was not originally a Dutch one. When Vasco da Gama rounded the Cape of Good Hope in 1498, 100 of his crew of 160 perished from scurvy.[6] This is one of the earliest reports on scurvy at sea. The earlier mariners probably escaped because they 'coasted'. The Portuguese used the island of Mozambique as a place of refreshment for their fleets.[6] This settlement provided the requirements and shelter for the fleets should they have to wait for a change of monsoon. It boasted a hospital 'ready for the reception of scurvy-stricken sailors and soldiers arriving from Europe'.

The French, too, were having their share of scurvy at this time. In the second voyage to Newfoundland in 1535 Jacques Cartier stated:

'An unknown sickness began to spread itself amongst us after the strangest sort that ever was eyther heard or seene, in so much that some did lose all their strength, and could not stand on their feete, then did their legges swel, their sinnowes shrink as black as any cole. Others also had all their skins spotted with spots of blood of a purple colour; then did it ascend up to their ankles, thighes, shoulders, arms and necks; their mouths became stincking, their gums so rotten that all the flesh did fall off even to the roots of the teeth which did almost all fall out. With such infection did this sickness spread itselfe in our three ships that we were not tenne whole so that one could help the other, a most horrible and pitiful case.'[9]

He wintered near an Indian village near Quebec. Indians, too, became affected but it was noticed that one Red Indian who had been seriously ill 12 days before, was now well. The remedy was a decoction made from the sap, leaves and bark of the *Ameda* tree. At this time 100 of his 103 men were desperately ill and 25 of them died. The response to the decoction was miraculous. A contemporary writer stated: 'If all the doctors of Montpellier and Louvain had been there with all the drugs of Alexandria, they would not have done as much in a year as that tree did in six days'.[6]

From the French, too, comes another fairly distinct account of scurvy.[10] This account was very much earlier, in 1260. In the memoirs of the Sieur de Joinville who accompanied the crusaders is this description:

'. . . a great calamity and disease came on the army, which was of such a nature, that the flesh of our legs dried to the bone and the skin was tanned blade and earth coloured like an old boot which had been hidden for a long time behind the boxes. And in addition another trouble happened to us who had this disease, an affection of the mouth, because we had eaten these fish, the flesh of our gums rotted and consequently our mouths smelled horribly. And in the end scarcely any escaped from the disease, but all died. And the sign of death which was consequently recognised was that one commenced to bleed from the nose and then one was sure to be soon dead.'

Their supposed cause of this disease, 'these fish', was 'barbel, which is a greedy fish and always goes to dead bodies and eats them'.

Yet nearly 3,000 years before this, the modern dietary conception of the etiology of scurvy was held. If one accepts Job's affliction[11] as being scurvy, as the first chapter of the Book of Isaiah tempts one to do, then it is of interest to note that the Lord said unto Job:

'Then will I also confess unto thee that thine own right hand can cure thee. Behold now behemoth, which I made with thee; he eateth grass as an ox. Lo now, his strength is in his loins. . . . Surely the mountains bring him forth food, where all the beasts of the field play.'

Swanson[12] points out that the ancient Hebrews talk of meat, milk, barley and wheat as chief articles of the diet, all poor sources of vitamin C. The Jews are known to have used copper-cooking vessels which would have promptly destroyed vitamin C.

Macrae[13] quotes Pliny as stating that even the campaigning Roman soldiers along the Rhine were not free of a disease which caused loosening of the teeth. This disease was cured by eating an indigenous plant, probably a type of sorrel. This was probably the 'scurvy grass' that, with watercress and oranges, was advocated by sixteenth century writers from the same area, e.g. Ronsseus, Claus Magnus, Echtius and Wierus.[9]

It was about this time that British reports began to come through. Sir Richard Hawkins in 1593 recorded that in his personal experience 10,000 seamen had died of the scurvy.[6] He wrote:

'The signes to know this disease in the beginning are divers, by the swelling of the gummes, by denting of the flesh of the leggs with a man's finger, the pit remayning without filling up in a good space; . . . others, complaine of the cricke of the back, etc., all which are for the most part, certain tokens of infection. The cause of this sicknes, some attribute to sloath; some to conceite, and divers men speake diversly. . . . That which I have seen most fruitful for this sicknesse, is sower Oranges and Lemmons, and a water which amongst others (for my particular provision) I carryed to the Sea, called Doctor Stevens, his water. . . .'

The story swings back to the arrival of Lancaster's fleet in Table Bay in 1600 on their way to India. All his ships, except one, carried men riddled with scurvy. On this ship each sailor had been given lemon juice daily.[9, 14] At the Cape they, as did the Dutch ships which followed later, ate scurvy grass, fresh water and meat for which they bargained with the Hottentots. '. . . as soon as they taste the shore, eat three leaved grass and fresh meat and the like and bathe and frolic in a small space.'[14]

It is surprising that this experimental proof by Lancaster in 1600 did not convince all that scurvy was easily prevented by a substance which could be carried in a condensed form. Only 200 years later was it made a regulation in the British Navy.[6] This step was due to the insistence of Sir Gilbert Blane, who acted on the work of Lind and Cook.

In 1747 James Lind performed his momentous experimental work on 12 scorbutics at sea on board the *Salisbury*. They were given a diet common to all.

'Two of these were ordered each a quart of cyder a day. Two others took twenty five drops of elixir vitriol, three times a day upon an empty stomach; having their gruels and their other foods well acidulated with it, as also the gargle for their mouths. Two of the worst patients, with tendons under the ham rigid (a symptom none of the rest had) were under a course of sea water. Of this they drank half a pint every day, and sometimes more or less, as it operated by way of gentle physic. Two others each had two oranges and one lemon given them every day. These they ate with greediness, at different times, upon an empty stomach. They continued but six days on this course, having consumed the quantity that could be spared. The two remaining patients took the bigness of a nutmeg three times a day of an electary recommended by a hospital-surgeon, made of garlic, mustard seed, rad. raphan, balsam of Peru, and gum myrrh; using for common drink barley water well acidulated with tamarinds; by a decoction of which with the addition of cremor tartar, they were greatly purged three or four times during the course. The consequence was, that the most sudden and visible good effects were perceived from the use of oranges and lemons; one of those who had taken them being at the end of six days fit for duty. . . . The other was the best recovered of any

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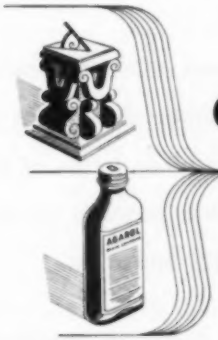

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in his condition; and being now deemed pretty well, was appointed nurse to the rest of the sick.

'Some persons cannot be brought to believe that a disease so fatal and dreadful can be prevented or cured by such easy means. They would have more faith in some elaborate composition dignified by the title of an antiscorbutic golden elixir or the like. . . . Facts are sufficient to convince the unprejudiced. . . . It is no easy matter to root out old prejudices or overturn opinions which have acquired an establishment by time, custom and great authorities.'

Captain Cook sent an account of his experiences on his voyage round the world to the Royal Society in 1776. He was forthwith elected a member and his paper honoured with the prize medal. Apart from 'rob of lemon and orange', he advocated sour kraut as 'it spoils not by keeping'.[6]

Prior to this Bachstrom[6] recorded in 1734 how a sailor in the Greenland ships was so bad from scurvy that his comrades put him ashore, leaving him to perish. He could only crawl but grazing 'like a beast of the field' he plucked up with his teeth a plant covering the ground. In a short while he was perfectly recovered.

It would be incorrect to attribute the progress in scurvy in the eighteenth century to the British only. Baumann[15] states that Kramer in 1720, an Australian physician, was faced with a severe epidemic in a field army in Hungary. In answer to his appeals a shipment of dried antiscorbutic herbs was sent to him but failed to cure the disease with the result that thousands died. He wrote:

'Scurvy is a terrible disease for which there is no known cure. Medication does not help, neither does surgery. Be careful of bleeding, shun mercury as a poison. The gums may be massaged, the stiff joints may be rubbed with fat, but all in vain. If one could have at hand oranges, limes and lemons, or their preserved pulp or juice so that lemonade could be made out of them, or administered as such in 3–4 oz. doses. Then one could be in a position to cure this disease without other help.'

Meanwhile at the Cape, although the incidence of the disease was dropping, the Dutch were still losing ships due to scurvy-stricken crews. In 1747 the *Reyersdal* ran aground and immediately broke up between Dassen and Robben Islands with only 25 men surviving. She was 4½ months out from Holland with 125 men dead from scurvy whilst those of the remaining 83 weakened, diseased crew, were too few to manage the ship.[16] In 1778 the *Venus* from Batavia just reached Delagoa Bay with a loose rudder and only 18 men able to man the ship.

The *Snoek* left Flushing on 10 June 1768 and reached the Cape of Good Hope five months later, with 30 dead and 58 sick, 'mostly down with scurvy'.[17]

At the close of the eighteenth century the Cape changed hands, and the British in turn reported on scurvy from this area. Rear-Admiral Pringle in 1797 requested reinforcements to garrison the Cape:

'The few people to be procured here, being little more than equal to the Deaths and other Casualties. I am sorry to add that the Scurvy has made very considerable progress in the ships returned from the sea. . . .'

In 1802, the time when lemon juice became compulsory in the British Navy, H.M.S. *Tremendous*, 14 weeks from Bombay, docked in Simon's Bay with her crew greatly afflicted with scurvy. All, except one, were cured with a liberal supply of 'fruit and vegetables, with fresh meat and other comforts'.[18]

The confusion of the words lemon and lime not only led to the nickname 'limies' but also, by the poor antiscorbutic properties of preserved lime juice, led to doubt about the dietary origin of scurvy. This doubt persisted throughout the nineteenth century and into the beginning of this century.

Consequently the regulation issue of lemon juice in the British Navy was not adopted by the Merchant Navy until a Parliamentary inquiry was held in 1865. This inquiry showed how ship owners and ship masters were sceptical of the value of lime juice. The reason was soon made clear because of 25 samples of lime juice from merchant vessels, analysis showed that 11 were diluted, 12 were solutions of citric acid, some of which contained sulphuric and others acetic acid.[10] Despite this, however, lime juice was made compulsory on the merchant ships.

It is no wonder then that the potassium theory, citric acid theory and acidosis theory[9] reigned supreme each in their turn, until just over 30 years ago, due in all probability to the inconstant effect of lime juice.

An excellent example of this is found in a report from Brown at the Pole only as recently as 1920.[9] He stressed that it was not the climate but scurvy that gave the polar regions their bad name. At Cape Flora the leader and staff lived chiefly on fresh bear meat, the crew stayed on board consuming tinned meat, tinned vegetables and the compulsory lime juice. The crew developed scurvy. A similar story emerged from Franz Joseph Land in 1894-95 where the crew on board the *Windward* had lime juice daily and all developed scurvy.[10]

Scurvy was still playing havoc on land. During the eighteenth and nineteenth centuries, scurvy, if not in military campaigns, generally occurred in prisons, insane asylums, poor houses or houses of refuge and correction.[9] Scurvy was rife in the Crimean War where 23,000 cases broke out in the French army alone.[19] Likewise it took its toll in the American Civil War, the first World War and the Russo-Japanese War. After the siege of Port Arthur, about half of the garrison of 17,000 had scurvy.[9]

At the Cape, however, reports from inland did not mention the disease. Lichtenstein[20] travelled inland from 1803 to 1806 and devoted two chapters of his book to disease. No mention of scurvy appears among either whites or blacks. Hofmeyr,[21] however, mentions that from the pioneering missionaries occasional reports of the existence of scurvy amongst the Natives were received.

That the disease was rare in inland areas, can be assumed when the returns of Hospital admissions in various centres of the Cape are studied. The port was Cape Town where at the Somerset Hospital in the years 1855 to 1865, there are records of 135 cases of scurvy, 4 of whom died. At Port Elizabeth Hospital, however (not a frequently used port then) only 5 patients were admitted from 1859 to 1866 and at Albany Hospital, 100 miles inland, this diagnosis was not made on any case admitted.[22]

Possibly with the Great Trek, the gun of the Boer kept him well supplied with fresh meat. He also planted fruit and vegetables wherever he and his family settled. In the Boer War, however, many reports of scurvy are to hand.[10, 13, 23, 24] Turner[10] describes how, before this, scurvy was prevalent in the gaols and prisons but in 1897 and 1898 it was particularly troublesome. He attributes this to the condition of the country at the time. There was a Native war (the Langberg Campaign), rinderpest had carried off nearly all the cattle and a long-continued

drought carried off the remainder. A serious shortage of labour occurred at the Kimberley diamond mines. Here the Native labourers were living on kiln-dried imported meal. Nearby, at Klipdam, a special scurvy hospital for 400 to 800 patients had to be run by the Government. Spencer [24] likewise felt that the outbreak in the Middelburg gaol was due to imported meal. Good fresh meal caused an improvement. Macrae [13] shows how the Bantu was free of scurvy whilst he followed the British troops and ate their rations, but once he had to fend for himself scurvy was common. European and Bantu prisoners in Gaberones, Bechuanaland, received the same mealie meal diet but the Europeans received meat in addition. Scurvy broke out among the Bantu and was cured by adding fresh meat to their ration. With improvement in the prison diet scurvy has almost been banished from South African gaols. In many places they now serve the role of 'nutritional hospitalization' as the hungry Bantu, raw from the country, is often driven to petty crime thereby.

'Those who know the Kaffir and his haphazard habits in regard to securing food' [13] will infer that scurvy depended on the goodness of his surroundings. The devastation of crops and cattle during the Boer War left the Bantu in a sorry plight.

In the 1914-1918 War the Bantu suffered again, but here scurvy broke out three to four months after their arrival in France from South Africa.[25] Dyke pointed out that often scurvy was seen in the Spring in South Africa after the previous crop of Kaffir corn had failed. He attributed this outbreak to the use of Kaffir beer made in France from ungerminated millet which is poor in vitamin C. He suggested good Kaffir beer made from germinated millet. Later Delf [26] showed the antiscorbutic properties of Kaffir beer in the monkey.

In the meantime Axel Holst and Frolich, in 1907, had produced scurvy experimentally in the guinea-pig and the epic race for the discovery of this anti-scorbutic vitamin started.[6, 9] The final discovery and synthesis probably resulted from Zilva's and Tillman's use of the redox dye (2:6 dichlorophenolindophenol) to distinguish fresh fruit juices, with high antiscorbutic value, from the stale juices having poor or no antiscorbutic properties. It is hard to believe that in a short space of 20 years the cause and final solution to a disease that had shaped the course of history from Biblical times, was discovered.

The war against scurvy was by no means entering its final stages in Southern Africa. A large epidemic amongst the Bantu mine labourers in Wankie, Rhodesia, in 1909 was reported by Hewetson,[27] who felt that dietary factors played no part in the etiology of scurvy. The magnitude of the problem on the Rhodesian and the Witwatersrand mines led to the appointment of a Commission, the findings of which were published in 1910.[28] In a report which could hardly be improved upon to-day they explain the factors underlying the prevalence of scurvy in Rhodesia. '. . . 1,671 cases were reported in Rhodesia in 1908 with 207 deaths, equivalent to a rate of 13.5%, but the Commission is convinced that the reported cases by no means represent the total number occurring.' The rarity of scurvy at the kraals led to the conclusion that the 'wants of an idle kraal Native are not to be compared with those of a mine labourer'. They were unanimous in their opinion that scurvy would be eradicated with improvement in the diet and strongly recommended Kaffir beer. It was, furthermore, their feeling that the recruits needed a long rest on a liberal diet, as often they arrived after a long and arduous journey, fed merely mealie meal and salt *en route*, 'with the disease upon them or develop it within three months'.

An excellent account of his experiences with scurvy on the Kimberley mines and elsewhere, was published a short time later by Turner.[10] He discusses fully the compound system, where the labourers are housed in living quarters but usually have to provide and cook their own food, a scheme still in existence in some areas to-day.

Hofmeyr [21] delves further into this problem in his review on the history of vitamin C deficiency in South Africa. The impact of civilization and the expansion of modern industry has led to the transfer of large numbers of aborigines from a natural life that they and their ancestors understood for centuries, to living and feeding conditions approaching that of the white man but completely foreign to them.

Almost ironically came the report of an epidemic in Rhodesia by Dry in 1933,[29] the same year as the sensational synthesis of vitamin C was achieved.

Antiscorbutic campaigners in South Africa were not dormant. The problem, thanks to the advance of chemical methods in determining the value of various antiscorbutic foods,[30] was slowly being solved. Scurvy on the mines was slowly disappearing. Supervision of cooking and of the rations issued, was probably responsible for this. Suddenly, in 1939, scurvy again appeared. This led to an intensive investigation by Fox *et al.*[31] where the same problems that faced the Rhodesian Commission in 1910 were brought to the fore. Here as before, it was the recruit arriving with low vitamin C stores as a result of his dietetic habits, which included excessive cooking, the use of iron pots, and the aversion to vegetables and to fresh milk. As Ungley [32] aptly sums up in stating that scurvy is common in men 'left to the mercy of their own culinary incompetence'.

The problem remains the same in certain areas to-day and with the rising cost of living and antiscorbutic foods and with the increasing exodus of the raw, uneducated, untrained Bantu to the larger towns, it may become even worse.

The approach to the problem is made even more difficult by the mentality of the type of patient liable to get scurvy and by the mentality of the Bantu. Divorced from his leisurely home life the rural Bantu seeks employment in positions where only unskilled, usually strenuous labour is available to him. Continuing on his precarious level of vitamin C intake with its consequent low store, he stands or falls in his adaptation to a life quite foreign to him.

It is true that with education and urbanization the Bantu is learning the European mode of life. His country cousin is still the same, however. Life-long habits are hard to change, especially in a superstitious mind. He still consumes the same porridge and Kaffir beer that his people have consumed for centuries. Neither he nor his ancestors have eaten the green vegetable or oranges on which the more civilized set so much store, yet manifest scurvy is almost unknown in the kraal or rural life of the primitive Bantu. It is not difficult, then, to understand his outlook when he laughs at the suggestion that such an incapacitat-

ing disease is caused merely by dietary mismanagement. Neither is it difficult to understand that the problems faced 30 years ago still remain the problems to-day; for the rural Bantu, as an individual, has changed in neither outlook nor habits. How aptly do Lind's concluding words, stated just over 200 years ago, apply to the rural Bantu of to-day.

Civilization is advancing rapidly. Ignorance is being eradicated in the correct way. The old prejudices are being rooted out where they started, in the kraals. Dotted throughout the Native reserves are Government Health Centres. The Bantu is being trained to cultivate his land, to grow vegetables, to get used to eating them and to cook them properly. Every year some advance, however small, is made. Every year more children and more mothers are being educated into a new way of life. Education of the grown-up Bantu male is, however, no easy matter, as with any primitive, superstitious people. Year by year there is a rising incidence of admissions to this hospital of adult Bantu males with scurvy. This reflects well the magnitude of the problem: a problem made no easier by the rising cost of living.

It will be seen, then, that there is still a long road to travel before a state comparable to that of more civilized countries is reached; a state where reports of scurvy are appearing less and less and where the presence of some predisposing factor and not merely gross ignorance has to be postulated for the occasional occurrence of a case. The final history of scurvy in South Africa has yet to be written.

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JAN VAN RIEBEECK'S PORTRAIT

F. W. F. PURCELL, M.R.C.S., L.R.C.P.
Cape Town

The portrait of Jan van Riebeeck reproduced in colour in this number was painted by Dr. Jan Pieter Veth in 1898.

In 1897 the librarian of the Cape Parliament expressed a wish to my great uncle, Mr. William Frederick Hertzog of Bergvliet, Constantia, that an empty space in the library above the door to the librarian's room might be filled by a portrait in oils of Jan van Riebeeck. Mr. Hertzog at once agreed to bear the expense of such a portrait, and commissioned Jan Veth of Bussum, near Amsterdam, to paint 2 portraits of Jan van Riebeeck, and one of his first wife, Maria de la Quellerie.

Dr. J. P. Veth was born at Dordrecht in 1864 and died in 1925. He was a portrait painter of considerable merit and also an etcher and lithographer. The portraits of Jan van Riebeeck were completed in 1898, that of Maria de la Quellerie a little later. I have a letter in Jan Veth's handwriting, dated 17 October 1899, regretting the delay in completing the latter picture. The portrait of van Riebeeck was accepted by Parliament in 1898, and is at present in the library. The second picture of van Riebeeck is the one reproduced, and is now in my possession. The portrait of Maria de la Quellerie was bequeathed by my mother, Mrs. Anna Purcell, to the Houses of Parliament, and when last seen was in the basement of the library.

Jan Veth based his portraits—they are not exact copies—on those in the Rijksmuseum painted by Dirk Craey in 1650 (Fig. 1). Only the portrait of Maria de la Quellerie has the date. It was not unusual for only one of a pair to bear the date.

I came upon the following description of the Veth portrait by the artist J. S. Morland in the *Cape Register* of 2 November 1898:

'This work is a most interesting specimen of Art. Although a copy of an old picture, it has the merit of being so faithfully rendered that it is difficult to persuade oneself that it is not of that period when Holland and its painters were the glory of the world. Certainly it evidences the fact that there

are still Dutch painters living of great ability. The original picture, painted presumably by an obscure artist named Craey, is at present in the Museum at Amsterdam.

'The costume, the pose, the arrangement of light and shade, and the simple yet harmonious colouring denote that the artist was contemporary with Rembrandt.

Fig. 1. Photograph by courtesy of the Rijksmuseum, Amsterdam.

'From the description given by the eminent modern Dutch painter, Mr. Veth, who undertook the task of copying the picture, the original work, although authentic as a portrait, is in a bad condition, and is a poor specimen of art. Under this gentleman's masterly hands, a copy has been produced which is both superb and complete as a portrait. It displays the breadth of the Great Master Rembrandt coupled with the clean and accurate drawing of van der Helst, the painter of the famous portrait of the City Guard of Amsterdam met to celebrate the Treaty of Munster in 1643.

'The scheme of colour is remarkably simple, low-toned greys forming the primaries.

'The principal dark is a rich blue-black velvet fringe or border of a cape or cloak, which is also blue black. This leads to a mass of dark brown hair which, according to the fashion of the day, is parted down the middle. This, again, leads to a perfectly harmonious but sombre green background of a graduated shade, the lighter portion being a little lower in value than the general tone of the face. This last feature is an introduction to the highest light of all—the collar. This is a most excellent piece of painting. As for the hand, the least that can be said is that it is a marvellous specimen of excellent and most delicate workmanship. It is said that the old Dutch painters had the reputation of making lace as well as painting it. The collar in this picture surely verifies that statement. It is not only in detail the work bears the stamp of truth. The expression also appeals strongly to the spectator. Large, liquid, dark brown eyes, and a forehead indicating the care and thought discoverable so often in the features of great men, are here most truthfully rendered. Mr. Veth has done his work so well that he puts to shame many of the present-day specimens of the so-called broad school.

'There is no scamping of hands or stiffening of draperies. The work must have been a labour of love to the artist, even as it will be a joy for ever to the spectator.

'The composition is simple and complete. The work is a half-length portrait, the hand leading unostentatiously into the picture, and the head naturally commanding the supreme interest.'

All portraits of Jan van Riebeeck have at some time or other been suspected of not being genuine likenesses of the first Commander of the Cape. Godee van Molsbergen, in his book on *Van Riebeeck, De Stichter van Hollands Zuid-Afrika,* preferred the so-called 'Batavian' portrait (Fig. 2), thought to have been painted in Batavia. Among his reasons were that this picture bore the van Riebeeck crest in the upper left corner, and a landscape on the right side which suggested Table Mountain. (An examination of the original picture shows how far-fetched the last suggestion is.) Van Molsbergen stated that the Craey picture was heavily over-painted, and that the then Director

Fig. 2. Photograph by courtesy of the Rijksmuseum, Amsterdam.

of the Rijksmuseum, Jhr. Mr. B. W. F. van Riemsdijk, was not certain that it was an original portrait. The *Cape Times* of 19 May 1951 published an interview with Dr. H. B. Thom, editor of the new edition of van Riebeeck's *Diary*, saying that he accepted van Molsbergen's con-

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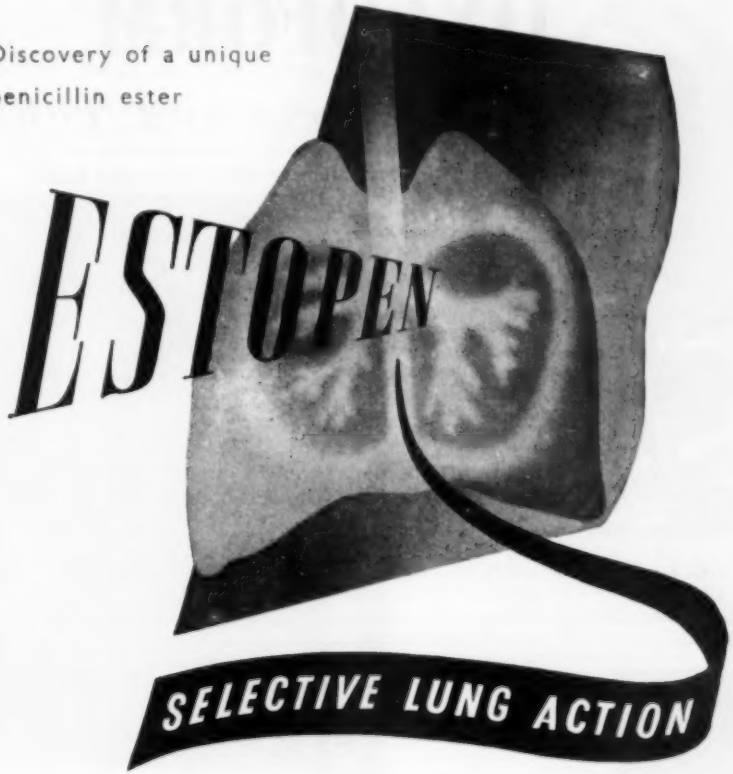

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clusions, and was not going to make use of the Craey portrait. This was certainly surprising news as the engraving of van Riebeeck on the South African banknotes is based on the Craey portrait, being taken from the Veth.

The *Cape Times* partly dispelled this doubt by writing to the Burgomaster of Culemborg (van Riebeeck's birthplace), and learning that the Municipality of Culemborg was satisfied that the Craey picture in the Rijksmuseum was an authentic one. Indeed, they have had a modern copy painted by H. J. Slijper for the Council Chamber in Culemborg Town Hall.

Fig. 3. Photograph by Bryan Heseltine.

I was struck by the fact that another van Riebeeck portrait, the so-called 'Town House' picture (Fig. 3) which bears a strong likeness to the Craey picture, was generally accepted as a genuine likeness. This picture was thought to have been painted at the Cape in 1664 by an unknown artist, and is now in the City Hall, Cape Town.

I also thought it strange that the companion Craey picture, that of Maria de la Quellerie, was considered a genuine likeness, and her husband not. I have in my possession the diaries of my father, Dr. W. F. Purcell. In that of 1911 is a note describing a meeting with the Director of the Rijksmuseum, the same Jhr. Mr. van Riemsdijk of whom van Molsbergen speaks. Van Riemsdijk told him that the Craey pictures were part of a set of family portraits given to the Museum by a connexion of the family, Jhr. Mr. J. H. F. K. van Swinderen, in 1884. Van Molsbergen suggested that the Craey pictures did not belong to this set but that the Batavian picture did. My father further describes how the portraits were taken from the walls and the backs carefully examined for inscriptions. On the back of each were inscriptions thought to be of a later period. On one was 'Maria de Quellerij of Quevellerius, Huisvr. van Johan van Riebeeck, geb. 28 Oct. 1609, gest. 2 Nov. 1661'. In the corner of the picture was a shield with three circles. The picture was signed '1650 D. Craey'. The other was labelled 'Johan van Riebeek Antoniez . . . 1650 ges. 1677'. The writing was very indistinct but could be made out clearly when it was held in a suitable light. I can remember being present at the time.

The inscriptions on the Craey van Riebeeck are not visible to-day as I noted when I was kindly shown the portrait by the Assistant Curator of the Rijksmuseum, Dr. R. van Luttervelt, in Cape Town. He informed me that the Craey picture was now thought to be an authentic likeness, but that the Batavian portrait was a doubtful likeness. This is a complete reversal of van Molsbergen's opinion. X-rays have shown that the Craey portrait of van Riebeeck is not heavily over-painted as van Molsbergen suggested. Dr. van Luttervelt told me that recent research has shown that it was quite possible that the Craey picture was a contemporary portrait of van Riebeeck painted while van Riebeeck was in Schiedam, the home of Maria de la Quellerie. They were betrothed at Schiedam on 11 March 1649 and were married soon after. This was just before van Riebeeck came to South Africa.

The portraits of van Riebeeck are of particular interest at the time of the Tercentenary. It is to be hoped that the question of a genuine likeness is now settled. We are indeed grateful to the Dutch Government for having sent out the Craey portraits, the Batavian portrait and the other portraits of van Riebeeck's family for exihibition in the Castle at Cape Town during the Tercentenary celebrations.

REVIEWS OF BOOKS

ANATOMY IN SURGERY

Anatomy in Surgery. By Philip Thorek, M.D., F.A.C.S., F.I.C.S. (Pp. 970 + xxiv, with illustrations. £9.) London, Philadelphia, Montreal: J. B. Lippincott Company. 1951.

Contents: 1. The Head. 2. The Neck. 3. The Thorax. 4. The Abdomen. 5. The Pelvis. 6. Male Perineum and External Genitalia. 7. Female Perineum and External Genitalia. 8. The Superior Extremity. 9. The Inferior Extremity. 10. Vertebral Column, Vertebral (Spinal) Canal, Spinal Cord. Index.

The production of this book called for an enormous effort from author, artist, printer and publisher. The general standard of reproduction of the coloured illustrations can seldom have been so high. No better advertisement for the technical excellence of American publishing can be imagined.

The book is described in the preface as a book on surgical anatomy. Textbooks of this subject usually confine themselves to aspects of anatomy which bear directly on the diagnosis and treatment of surgical disorders. Dr. Thorek, however, has included a great deal of general regional anatomy, and also many descriptions of the steps of surgical operations, often with brief statements of their indications. Even so large a volume as this cannot hope to cover all these fields exhaustively, and inevitably many important subjects are either

omitted (e.g. spondylolisthesis, the fractured neck of femur) or insufficiently discussed.

There can be no hesitation in recommending this book to the undergraduate grappling with surgical technique for the first time, particularly if anatomy was never his strong point. The post-graduate, too, may find it helpful as a first revision, but if he aims at higher qualifications, here or in Great Britain, he will find it necessary to know much that is not described in this work.

Among so many excellent illustrations, two stand in need of revision. Fig. 43 in its present form is incorrect—the abducent nucleus does not supply rectus medialis, and Fig. 142 unfortunately shows the recurrent laryngeal nerve running in front of the cricothyroid joint.

THE THYROID

The Thyroid. By Thomas Hodge McGavack, B.A., M.D., F.A.C.P., with a section on Surgery by James M. Winfield, B.A., M.D., F.A.C.S. and Walter L. Mersheimer, B.S., M.D., F.A.C.S., and a section on History by Dorothy B. Spear, Ph.B., Librarian, and Thomas Hodge McGavack. (Pp. 646, with 72 figures and 21 tables. £5 14s. 9d.) St. Louis: C. V. Mosby Company. 1951.

Contents: *Section I. History*. 1. Goiter: Early History and Folklore. 2. Iodine and Goiter. 3. Anatomy, Physiology, and Chemistry. 4. Hypothyroidism. 5. Hyperthyroidism. 6. Some Recent Discoveries: Newer Tools and Investigation and Therapy. *Section II. Anatomical, Chemical, and Physiological Considerations*. 7. The Metabolism of Iodine. 8. Anatomy and Histochemistry of the Thyroid Gland. 9. The Synthesis and Nature of Thyroid Hormone. 10. The Extrathyroidal Production of Hormonally Active Iodinated Proteins. 11. Extrathyroidal Factors Known to Influence the Follicle and its Cycle Activity. 12. The Thyrotropin-Thyroid Hormone-Iodine Balance (Iodopituitothyroid Axis). 13. Known Physiological Actions of Thyroid Hormone. 14. Interrelationship between the Thyroid and Other Glands of Internal Secretion. 15. Interrelationships Between Thyroid Function and Vitamin Metabolism. 16. Antithyroid Compounds. 17. Radio-active Isotopes of Iodine and the Thyroid. 18. Pregnancy and the Thyroid. *Section III. Morbid States*. 19. Classification of Thyroid Disease. 20. Disturbances of the Thyroid Gland due to or Closely Associated with Congenital Anomalies: I. Embryology and Anatomy. 21. Disturbances of the Thyroid Gland due to or Closely Associated with Congenital Anomalies: II. Heterotopic Thyroid Tissue. 22. Disturbances of the Thyroid Gland due to or Closely Associated with Congenital Anomalies: III. Heterotopic Thyroid Tissue (continued). 23. Disturbances of the Thyroid Gland due to or Closely Associated with Congenital Anomalies: IV. Thyroglossal Duct Cysts, Sinuses, and Fistulas. 24. Intrathoracic Goiter. 25. Thyroiditis: I. Acute and Subacute. 26. Thyroiditis: II. Chronic. 27. Specific Chronic Infections. 28. Iodine Deficiency Goiter (Subiodic Goiter). 29. Hypothyroidism: I. Before Full Maturity. Cretinism. 30. Hypothyroidism: II. After Maturity. Adult Myxedema. 31. Dyspituitrous Myxedema. 32. Nodular Goiter. 33. Carcinoma of the Thyroid Gland. 34. Hyperthyroidism: I. Definition, Classification, and Pathology. 35. Hyperthyroidism: II. Clinical Manifestations. 36. Hyperthyroidism: III. Laboratory Diagnosis. 37. Hyperthyroidism: IV. Clinical Diagnosis and Complications. 38. Hyperthyroidism: V. Treatment. 39. Ophthalmopathic Graves' Disease. 40. Miscellaneous Diseases of the Thyroid. *Section IV. Surgical Considerations*. 41. History of the Technic of Thyroidectomy. 42. Indications for Surgery. 43. Preoperative Preparation. 44. The Surgical Anatomy of the Thyroid Gland. 45. The Technic of Subtotal Resection of the Thyroid Gland. 46. Postoperative Care. References.

Professor McGavack's researches into the applied physiology of the thyroid hormone are well known. It is therefore to be expected that such an authority would be able to present comprehensively the existing factual material through which has been furthered an understanding of the fascinating and busy role in body economy of that factory for the production of thyroid hormone, the thyroid gland. Furthermore, in the light of recent work on thyro-active iodinated proteins, on the thyroid-stimulating hormone of the pituitary (thyrotrophin or TSH), on anti-thyroid compounds and on radio-active iodine, we are more readily able to understand the interrelationship between thyrotrophin, thyroid hormone and iodide—the so-called iodo-pituito-thyroid axis.

The section on morbid states of the thyroid gland is particularly well documented and makes easy reading for student, internist and researcher. The major points related to pathological physiology are included under each disease, although details of the histological, chemical and physiological background of each had already been dealt with exhaustively in the second section of the book.

An excellent account is given of treatment of the various thyroid disorders. This applies particularly to the section on antithyroid compounds and their role in the treatment of hyperthyroidism. The use of radio-active isotopes of iodine in treatment and research is up to date. The chapter on *Malignant Exophthalmos* is excellent. One disappointment is the chapter on *Dyspituitrous Myxoedema*, which is almost sketchy and does not even refer to the writings of Sheehan on this subject.

The last section of the book is devoted to surgical considerations in the treatment of thyroid disorders—brief but adequate.

The references at the end of each section are most complete and up to date.

This is an excellent textbook on the subject and highly recommended for reading and reference by students, practitioners and researchers alike.

THE INTERNATIONAL PHARMACOPOEIA

Expert Committee on the International Pharmacopoeia. Report on the Eighth Session, Geneva, 19–28 April 1951. World Health Organization Technical Report Series No. 43. (Pp. 36. 2s.) Geneva, Switzerland: World Health Organization. Pretoria: Van Schaik's Bookstore (Pty.). 1951.

The report on the eighth session of the WHO Expert Committee on the International Pharmacopoeia—formerly called the Expert Committee on the Unification of Pharmacopoeias—is now available as No. 43 in the *World Health Organization: Technical Report Series*.

The introduction to this report states that the Deputy Director-General of WHO, addressing the opening meeting of the eighth session, 'stressed the importance of establishing common standards of purity and potency for drugs in the different countries through the *Pharmacopoea Internationalis* (Ph.I.) and indicated that the Ph.I. would be of special interest to countries lacking financial resources for preparing a national pharmacopoeia'. The Deputy Director-General went on to say that the national pharmacopoeia commissions in several countries 'had asked WHO to provide them with the necessary basis for their work and were counting on the Ph.I.'

The major part of the report deals with the consideration of the material to be included in volume II of the Ph.I. Many draft monographs and appendices were considered by the committee and several of these—including monographs giving specifications for injections, tinctures, and tablets of some of the drugs described in volume I of the Ph.I.—were finally approved and released for printing. A complete list of the monographs and appendices which have so far been submitted for inclusion in volume II is given in an annexure. In another annex, the different tasks—for example, the preparation of draft monographs and the carrying out of experimental investigations—assigned to various members of the committee are listed.

Other subjects discussed in the report are: the negotiations with the Belgian Government regarding the establishment of the permanent International Pharmacopoeia Secretariat; and the arrangements for the publication of volume I of the Ph.I.

A third annex is devoted to the report on the second session of the committee's Subcommittee on Non-Proprietary Names. This report points out that one of the major difficulties in selecting non-proprietary names is ascertaining that a proposed name is not already a registered name in some countries. In this connexion, the Subcommittee appreciated the fact that the International Union for the Protection of Industrial Property, Berne, had agreed to help in the search for registered names.

In appendices to the Subcommittee's report, the general principles for establishing a system of international non-proprietary names are laid down, and the Latin, English, and French non-proprietary names adopted for 78 of the drugs and preparations considered by the Subcommittee are listed, together with their appropriate chemical names or descriptions.

CANCER

The Book of Cancer Relief. Prepared under the auspices of the National Society for Cancer Relief. (Pp. 92. 2s. 6d.) London: National Society for Cancer Relief.

This is an interesting and useful manual which should prove of great value in propogating knowledge amongst laymen about the war against cancer. Although the account deals with the position in Great Britain, the lessons to be learnt are equally applicable all over the world.

It is to be hoped that *The Book of Cancer Relief* will have a wide circulation in South Africa.

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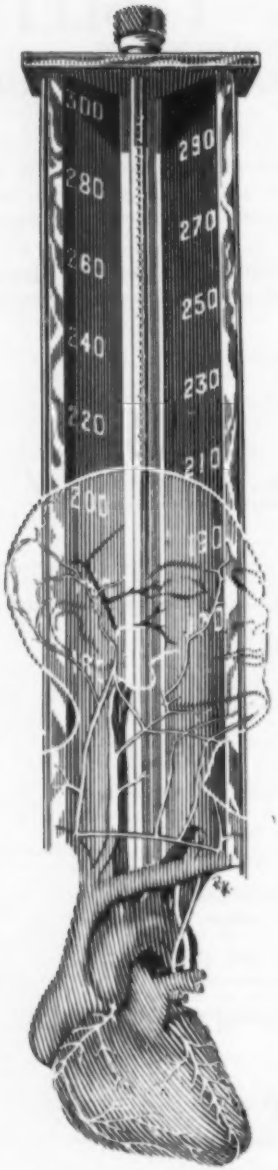

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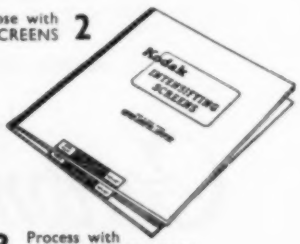

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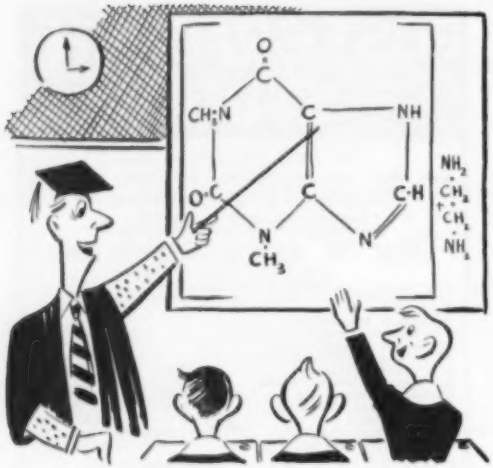

As a diuretic in Cardiac and Renal Oedema, in Eclampsia and Angina Pectoris. Peterphyllin exerts a stimulatory effect on the Medullary Respiratory Centres

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Gr. 1½ and Gr. 3
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Peterphyllin ... ... 1½ gr.
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PETERPHYLLIN INTRAVENOUS
0.25 gm. (3¾ gr.) in 10 c.c.
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0.5 gms. (7½ gr.) in each
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P.10

South African Railways and Harbours Sick Fund

APPOINTMENT OF RAILWAY MEDICAL OFFICER: WOLMER (PRETORIA)

Applications are invited from registered medical practitioners for the position of Railway Medical Officer, Wolmer, at a salary of £763 per annum, plus the fees and allowances prescribed by the Regulations of the Sick Fund, and with the right of private practice.

The salary will be subject to adjustment in accordance with the census of members to be taken on 1 April of each year.

The appointment will be made in terms of the Regulations of the Sick Fund, and will be subject to termination on 4 months' notice being given by either side.

The successful candidate will be required to reside at Pretoria within the medical district, to take up the appointment on a date to be arranged, and to carry out his duties in accordance with the Regulations of the Sick Fund.

Applications should reach the District Secretary, Eastern Transvaal District Sick Fund Board, Scheiding Street, Pretoria, not later than 26 April 1952, and should state:—

1. Full name.
2. Qualifications (when and where obtained).
3. Experience (when and where obtained).
4. Date of birth.
5. Country of birth.
6. Whether married or single.
7. Whether fully bilingual.
8. Whether South African citizen.
9. What Government appointment, if any, is held.

Canvassing by or on behalf of any applicant is liable to disqualify such applicant.

Any further particulars may be obtained from the District Secretary at the above address, on application.

P. J. Klem
Johannesburg *General Secretary*

Siekefonds van die Suid-Afrikaanse Spoorweë en Hawens

AANSTELLING VAN SPOORWEGDOKTER: PRETORIA-NOORD

Applikasies word van geregistreerde mediese praktisyns ingewag vir die betrekking van spoorwegdokter, Pretoria-Noord, teen 'n salaris van £595 per jaar, plus die gelde en toelaes wat in die regulasies van die Siekefonds voorgeskryf word, en met die reg om privaat te praktiseer.

Die salaris is onderhewig aan wysiging in ooreenstemming met die sensus van lede wat op 1 April elke jaar afgeneem moet word.

Die aanstelling geskied kragtens die regulasies van die Siekefonds, en opsegging van dienste is onderworpe aan vier maande kennisgewing deur een van beide partye.

Die suksesvolle applikant moet op Pretoria in die geneeskundige distrik woon, diens aanvaar op 'n datum wat gereël sal word, en sy pligte ooreenkomstig die regulasies van die Fonds uitvoer.

Aansoeke moet die Distriksekretaris, Distriksiekefondsraad, Oos-Transvaal, Scheidingstraat, Pretoria, nie later nie as 26 April 1952 bereik, en applikante moet die volgende vermeld:—

1. Volle naam.
2. Kwalifikasies (waar en wanneer verkry).
3. Ondervinding (waar en wanneer verkry en opgedoen).
4. Datum van geboorte.
5. Land van geboorte.
6. Getroud of ongetroud.
7. Of ten volle tweetalig.
8. Of Suid-Afrikaanse burger.
9. Watter staatsbetrekking, indien enige, beklee word.

Werwing deur of ten behoewe van enige applikant stel so 'n applikant bloot aan diskwalifikasie.

Enige ander besonderhede wat verlang word, kan op aanvraag van die Distriksekretaris by bovermelde adres verkry word.

P. J. Klem
Johannesburg *Hoofsekretaris*

Transvaal Provincial Administration

VACANCIES: TRANSVAAL PUBLIC HOSPITALS

Applications are invited from suitably qualified candidates for the undermentioned posts at Public Hospitals in the Transvaal.

Applications should be addressed to the Medical Superintendents of the Hospitals concerned, and should contain full particulars as to the age, professional, academic and language qualifications, experience and conjugal status of the applicant and should further indicate the earliest date upon which duties can be assumed. Copies, only, of recent testimonials to be attached.

Hospital	*Vacant Post*	*Emoluments*	*Remarks*
Elsie Ballot: Amersfoort:	Part-time General Practitioners (2)	£170 p.a. (To Be Divided)	One to act as part-time Medical Superintendent. Closing date 17:4:52.
Ermelo:	Part-time General Practitioners (2)	£340 p.a.	To do 2 sessions per week. Closing date 17:4:52.
Far East Rand, P.O. New State Areas:	Full-time Anaesthetist (1)	£1,800 p.a.	Must be a registered medical practitioner having necessary experience. To relieve at East Rand Hospitals. Married plus (*a*) below. Single plus (*b*) below.
Johannesburg Hospital Board and the University of the Witwatersrand:			
	Registrar (Department of Paediatrics) (1)	£620—780—820—860	Must be a registered medical practitioner. Married plus (*a*) below. Single plus (*b*) below.
Nigel, P.O. Dunnottar:	Part-time Dermatologist (1)	£205 p.a.	To do 1 session per week. Closing date 17:4:52.
Vereeniging:	Casualty Officer (1)	£600 p.a.	Must be a registered medical practitioner. Married plus (*a*) and (*c*) below. Single plus (*b*) below.
	Medical Registrar (1)	£620—780—820—860	Must be a registered medical practitioner. Married plus (*a*) below. Single plus (*b*) below.

(*a*) £256 per annum cost-of-living allowance.
(*b*) £80 per annum cost-of-living allowance.
(*c*) £60 per annum temporary allowance.

Full-time employees receive in addition to their salaries and cost-of-living allowance, the following privileges: Leave and rail concession.

Closing date of applications: 14 April 1952.

Application forms are obtainable from the Provincial Secretary, Hospital Services Branch, P.O. Box 383, Pretoria. (34450)

Radiological Partnership Required

Radiological practice or partnership in South Africa desired by qualified British Radiologist (D.M.R.), meantime holding Senior Specialist appointment in England with extensive diagnostic and therapy experience. Substantial capital available. Short preliminary assistantship acceptable. Write to 'A. L. G.', P.O. Box 643, Cape Town.

Oostelike Vrystaat-Praktyk

Grens van Basutoland. Bruto inkomste 1951, £3,300. Kontant inkomste van Naturellepraktyk £2,000. Gozie geleentheid vir uitbreiding. Skryf aan ‚A. L. E.', Posbus 643, Kaapstad.

Siekefonds van die Suid-Afrikaanse Spoorweë en Hawens

AANSTELLING VAN SPOORWEGDOKTER: VILLIERIA (PRETORIA)

Applikasies word van geregistreerde mediese praktisyns ingewag vir die betrekking van spoorwegdokter, Villieria, teen 'n salaris van £1,259 per jaar, plus 'n werkwinkeltoelae van £100 per jaar, plus die gelde en toelaes wat in die regulasies van die Siekefonds voorgeskryf word, en met die reg om privaat te praktiseer.

Die salaris is onderhewig aan wysiging in ooreenstemming met die sensus van lede wat op 1 April elke jaar afgeneem moet word.

Die aanstelling geskied kragtens die regulasies van die Siekefonds, en opsegging van dienste is onderworpe aan vier maande kennisgewing deur een van beide partye.

Die suksesvolle applikant moet op Pretoria in die geneeskundige distrik woon, diens aanvaar op 'n datum wat gereël sal word, en sy pligte ooreenkomstig die regulasies van die Fonds uitvoer.

Aansoeke moet die Distriksekretaris, Distriksiekefondsraad, Oos-Transvaal, Scheidingstraat, Pretoria, nie later nie as 26 April 1952 bereik, en applikante moet die volgende vermeld:—

1. Volle naam.
2. Kwalifikasies (waar en wanneer verkry).
3. Ondervinding (waar en wanneer verkry en opgedoen).
4. Datum van geboorte.
5. Land van geboorte.
6. Getroud of ongetroud.
7. Of ten volle tweetalig.
8. Of Suid-Afrikaanse burger.
9. Watter staatsbetrekking, indien enige, beklee word.

Werwing deur of ten behoewe van enige applikant stel so 'n applikant bloot aan diskwalifikasie.

Enige ander besonderhede wat verlang word, kan op aanvraag van die Distriksekretaris by bovermelde adres verkry word.

P. J. Klem
Hoofsekretaris

Johannesburg

Cape Provincial Administration

HOSPITALS DEPARTMENT

VACANCIES: HONORARY MEDICAL STAFF

Applications are invited from registered medical practitioners under the age of 60 years for appointment to the following posts on the honorary staff of the Provincial Hospital, Port Elizabeth:—

(a) Two Registrars to the Department of Obstetrics and Gynaecology.

(b) Two Clinical Assistants to the Department of Obstetrics and Gynaecology.

(c) One Registrar to the Ear, Nose and Throat Department.

The appointments are subject to the Hospitals Ordinance No. 18 of 1946 (Cape), as amended, and to the rules and regulations of the Department.

Applications, containing full particulars of qualifications, etc., must be addressed to the Medical Superintendent of the Provincial Hospital, Port Elizabeth, to reach his office not later than 26 April 1952.

C. G. Keyter
Branch Representative

Cuthbert's Building
P.O. Box 80 2400
Port Elizabeth
19 March 1952

Practice for Sale

In attractive Northern Transvaal country village. Two appointments. Income £2,000 per annum. Premium £750, including dispensary and subject to appointment being transferred. Write 'Medical', P.O. Box 2555, Johannesburg.

The Medical Association of South Africa
Die Mediese Vereniging van Suid-Afrika

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KAAPSTAD : CAPE TOWN

Posbus 643, Telefoon 2-6177 : P.O. Box 643, Telephone 2-6177

PRAKTYKE TE KOOP : PRACTICES FOR SALE

(972) Eastern Province hospital town. Average gross annual receipts, £4,100. Some dispensing done. Premium required £2,800, which includes drugs, surgery furniture, waiting-room furniture and most instruments. House for sale at £2,000 for which terms could be arranged. Pleasant district.

(975) Cape Midlands hospital town. Well-established solus practice especially suitable for man whose wife is a doctor too. Average annual receipts, £3,100. Three appointments held. Premium required £3,000, which includes drugs, surgery fittings, curtains, linen, furniture and all instruments. Terms could be arranged. House for sale at £3,000.

(673) Natal. Average gross receipt £1,650 p.a. Prescribing. Premium required £1,275. One appointment £200 p.a. Good scope for expansion. Double-storied seven-roomed house situated on 1½ acres and separate surgery building for sale at £6,500. Surgery may possibly be rented by arrangement at approx. £8 p.m. Picturesque surroundings. Climate notably cooler than that of the coast.

(746) Large dispensing practice, mainly non-European. Average annual cash receipts approx. £5,200. £5,500 required for premium, drugs and surgery furniture. Details on application.

(350) Eastern Cape hospital town. Total gross receipts preceding 13 months, £3,700. One appointment. Premium, £1,500. House for sale at £3,000. Large bond available. £700 rebate if appointment not transferred. Practice offers great scope for practitioner with surgical ability.

(895) Specialist physician's practice. Details on application.

(963) Large Karoo hospital town. £200 required for drugs, furniture and fixtures and goodwill of nucleus. Terms available. Definitely good scope for expansion.

(992) South-Eastern Cape hospital town. Premium required £1,500 which includes drugs, furniture and instruments worth approximately £1,350. Flat plus surgery to let at £6 p.m.

(993) Noord-Kaapland. Dorp met privaat verpleeginrigting. Gemiddeld £200 p.m. kontant ontvangste. Koopprys van £5,500 sluit in huis en 2 aparte geboue, meubels, instrumente, medisyne en praktyk.

(636) Cape Town suburban practice. Non-European. Rental for house £5 p.m.

(1003) Transkei. Well-established dispensing practice. Total cash receipts 1951, £3,311. D.S. and M.O.H. appointments. Large well-built house for sale at £3,300. Premium required £1,500.

(1005) Cape Town. Nucleus of practice in residential area. Premium required £750.

* * * *

JOHANNESBURG

Medical House, 5 Esselen Street. Telephone 44-9134-5, 44-0817
Mediese Huis, Esselenstraat 5. Telefone 44-9134-5, 44-0817

ASSISTENTE/PLAASVERVANGERS VERLANG
ASSISTANTS/LOCUMS REQUIRED

(L/V200) S.W.A. Locum required for two months—June and July, or July and August. Terms: £3 3s. per day, and all found. Preferably Gentile. Very little travelling. Car could be provided. Return fare by air or train will be refunded.

(L/V202) Southern Transvaal. Gentile as locum in partnership practice, for 9 to 12 months. Starting 1 May. Salary and allowance to be arranged.

(L/V205) Southern Transvaal. Locum required for 2 months—June and July. Bilingual Gentile. Salary £2 12s. 6d. per day, all found and free petrol and oil. Alternate nights off.

(L/V209) Western Transvaal town. Afrikaans-speaking locum required for the month of July. Car could be provided. Terms: £3 3s. per day, all found and travelling costs refunded. If using own car, 9d. per mile travelling allowance will be paid.

(L/V210) S.W.A. Locum for one month, starting 17 May. Terms: £2 12s. 6d. per day and all found. Travelling costs will be refunded.

(L/V212) Locum required for month of July, in partnership practice, in Eastern Transvaal. Easily run dispensing practice, with little night work. Terms: £2 2s. per day, all found, plus car allowance and free petrol and oil. Locum must have own car.

(L/V213) O.F.S. practice. Locum required for 2 to 3 months. Must have own car. Salary and allowances to be mutually arranged.

* * * *

DURBAN

112 Medical Centre, Field Street. Telephone 24049

PRACTICES FOR SALE : PRAKTYKE TE KOOP

(PD6) Radiological practice, established 1923, in large coast city. Equipped for diagnosis, superficial and deep X-ray therapy and also superficial radium therapy. Extensive ground-floor rooms to be taken over on long lease. Premium required £6,750 cash, or terms arranged under suitable guarantees. For immediate sale.

(PD7) Solus prescribing practice on Natal South Coast. Scope for Native practice which at present is discouraged. Hospital facilities available at Port Shepstone Hospital, approximately 10 miles from consulting rooms. Premium required £2,500, which includes instruments, drugs, and furniture. Cash is preferred, but terms could be discussed. It is preferred not to sell this practice before the end of June 1952, but introduction could commence without delay and principal will allow half the net income. No appointments held. House is for sale at £4,500, partly furnished, but is not part of the practice.

(PD8) Natal South Coast practice. Would suit retired doctor. European population approximately 100. 31 miles from Bizana, 22 miles from Margate. Premium required £400, includes a good stock of drugs, dressings, instruments and surgery furniture. House for sale £1,800, including stand of ¼ morgen. For immediate sale.

Medical Officer Required

Applications are invited for the position of medical officer to the Vaal Potteries Limited Medical Benefit Fund. Particulars regarding the position can be obtained from the Secretary, P.O. Box 49, Meyerton, Transvaal. Telephone: 27.

For Sale

Watson microscope in very good condition. Previously in the possession of the late Dr. C. C. Rowland. The microscope can be seen at the home of Mrs. H. Fuller, 'Tristan', 13 Camp Ground Road, Mowbray, Cape. Telephone: 6-6307.

Medical Officer Required

Part-time medical officer required for staff of factory Sick Benefit Fund in Northern Suburbs. Hours to be arranged. Monday to Friday. Write to P.O. Box 11, Cape Town.

Required

Partner in long-established general practice in large city in Transvaal. Reply, stating age, qualifications, experience, etc., to 'A. L. H.', P.O. Box 643, Cape Town.

Rooms To Let

To share in established dental practice in centre of Cape Town. Ideal opportunity. Write 'P.H.', P.O. Box 1086, Cape Town.

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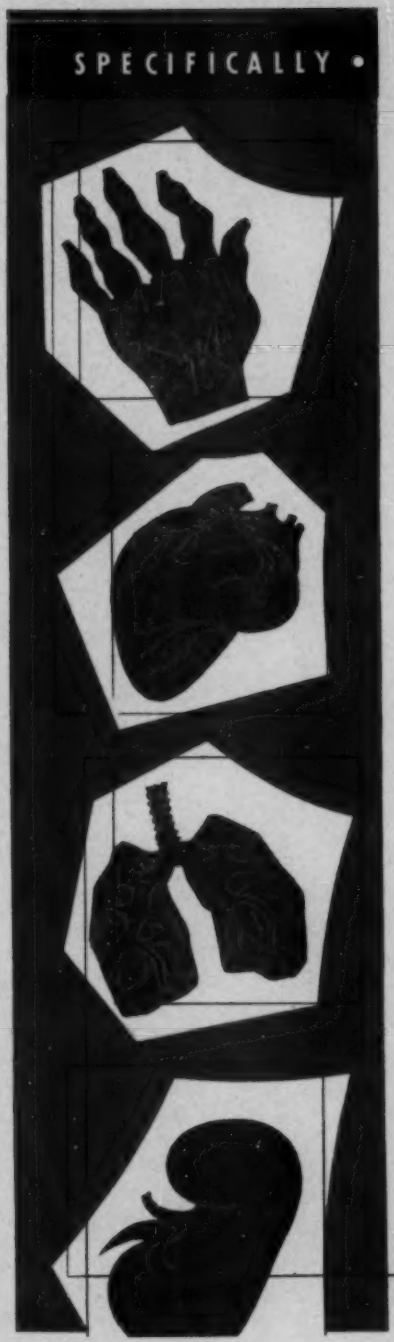

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Administration of ACTHAR initiates a chain of physiologic mechanisms in the service of preventing or correcting fundamental manifestations of disease.

✔ ACTHAR, the specific pituitary stimulant hormone for the adrenal cortex, causes the adrenal glands to synthesize and secrete the entire spectrum of corticoids. These powerful physiologic agents control the mobilization and utilization of energy, inhibit cellular injury, and prevent or reverse the concomitant inflammatory reaction—a basic manifestation common to a wide variety of diseases.

ESTABLISHED INDICATIONS: Rheumatoid arthritis, rheumatic fever, acute lupus erythematosus, severe asthma, drug sensitivities, contact dermatitis, most acute inflammatory diseases of the eye, acute pemphigus, exfoliative dermatitis, ulcerative colitis, acute gouty arthritis, secondary adrenal cortical hypofunction, acute alcoholism and acute delirium tremens.

ACTHAR is available in vials of 10, 25 and 40 I.U. (mg.). The Armour Standard of ACTHAR is now accepted as the International Unit; 1 International Unit is identical with 1 milligram of ACTHAR.

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Local Anaesthesia in Obstetrics

PUDENDAL BLOCK *with* Hyalase REG

Pudendal block is described by Heins* as being an almost perfect form of anaesthesia for delivery and postpartum repair. Within three minutes of injection, considerable perineal gaping is effected which facilitates breech and low forceps deliveries and lessens the risk of perineal laceration.

Pain caused by perineal stretching is entirely avoided. The most effective anaesthetic preparation is composed of:—

30 c.c. of 1% procaine
0.5 c.c. adrenalin
1,000 Benger units 'Hyalase'
(Hyaluronidase)

The incorporation of the enzyme hyaluronidase results in complete and almost instantaneous perineal anæsthesia. Injection of the nerve is rendered unnecessary when the preparation is infiltrated into the vicinity of the nerve.

TECHNIQUE

The ANAESTHETIC-HYALASE solution is administered as follows:-

The needle is inserted as far as the ischial tuberosity, 5 ml. of solution being introduced posteriorly and medially to anaesthetise the perineal branch of the posterior cutaneous femoris nerve. In order to anaesthetise the pudendal nerve where it enters Alcock's canal, the needle is passed horizontally to the ischial spine and a further 5 ml. is deposited in this region. An additional 5 ml. is then infiltrated in the superior portion of the labia minora in order to anaesthetise the perineal branches of the ilio-inguinal nerve. A similar procedure is carried out on both sides of the perineum.

By this method effective pudendal block is obtained without injection of the nerve. Heins reports that in 50 cases so treated anaesthesia was almost instantaneous, with all the advantages and none of the disadvantages of spinal anaesthesia.

Further information may be obtained on request from

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229 Commissioner Street
JOHANNESBURG
P.O. Box 5788

*SOUTH CAROLINA MED. ASS. JOURNAL 1950, 46, 309.